BULLETIN

MADRAS DEVELOPMENT SEMINAR SERIES

VOLUME VII No. 12 SPECIAL NUMBER DECEMBER 1977

74, SECOND MAIN ROAD, GANDHINAGAR,
ADYAR, MADRAS-600 020.

MONTHLY BULLETIN

CONTENTS

	Page
1. Editorial—Some Highlights	
I. General Economic Scene ...	683
II. Agricultural Development ...	700
III. Industrial Development ...	703
IV. Education, Science and Health ...	706
V. Employment ...	710
VI. Other Items ...	711
2. The Role of Women - A Tamilnadu Perspective by *Y. Shanmugasundaram* ...	714
3. Some Tasks Facing Secondary Education ...	735
4. Book Review ...	742

SPECIAL SECTION

1. Village Studies - Village Economic Surveys by *B. Krishna Rao* ...	S. 33
2. Village Studies-Anthropological Study of Indian Villages by *N. Subba Reddy* ...	S. 36
3. Village Studies - Impact of Directed Changes on Two Mysore Villages by *C. Parvathamma* ...	S. 44

EDITORIAL—SOME HIGHLIGHTS

I General Economic Scene

State:

Weather and Prices:

In the month of October, the North East monsoon started and brought to all parts of the State copious rains. The irrigation tanks in Madurai and Tirunelveli districts and the Nagercoil area of Kanyakumari district are near full, with the Vaigai and Krishnagiri reservoirs surplusing. The hydel reservoirs in the Western Ghats also received rains, improving the power generation position of the State. At the end of October, the water level in Mettur rose to 36 metres (against its capacity of 36.62 metres), compared to a little over 2.5 metres at this time in 1976. In fact, in some areas, flood conditions obtained and people and cattle had to be moved to areas of safety. Due to heavy rains in both Madurai and Ramanathapuram districts, the Vaigai river touched flood level. The city and its neighourhoods received heavy rains during the month, adding to the water storage levels at Red Hills, Poondi, Tamarapakkam and Cholavaram. Towards the end of the month, low lying areas of the city were flooded and 45,000 slum dwellers had to be evacuated to safe areas. Thus all irrigation tanks and reservoirs in the State received copious water supplies in October, setting the stage for a good samba crop, as will be noted later. On the price front, October witnessed a rise in the price of rice in the North Arcot district. The rise varied by Rs. 15 to Rs. 20 per bag of 75 kg. in the paddy and rice markets of Vellore, Arni, Ranipet and Tiruvannamalai, with a corresponding spurt in retail prices. The reason for this increase was not evident except that it is linked to the removal of the control on movement of rice and paddy throughout the country (Vol VII p 632), a matter to which reference will be made in the agricultural development section of the editorial. CSO's monthly statistics publication reports a slight rise in consumer prices for May from 298–299 in the previous months to 300. Rural prices in May, however, maintained their April fall to 324 for food and 303 general (Vol VII p 621). The prices as between Madras city and other mofussil areas also continue to maintain the differential noted earlier, at 302 for Madras and 284 and 299 for Madurai and Tiruchirapalli respectively.

Power :

Power supply in October in the State was normal as in the previous months alongside of improved hydel storage. In October, due to industrial unrest in the Electricity Board, there was load shedding affecting the industries. Increased generation is under way. The Third 210 MW thermal unit at Tuticorin cleared by the Planning Commission is now being fabricated by BHEL, so that it can be commissioned in December 1980. The first two units of similar capacity are being completed by BHEL using its existing construction facilities, so that the first unit will be commissioned in December 1978 and the second In June 1979. Also BHEL engineers and the Tamil Nadu Electricity Board technicians are renovating the Ennore plant so that it can generate at/or near installed capacity. By October all instrumentation work for ensuring automatic operation of generating units has been completed at the plant, the first 60 MW unit is now undergoing statutory overhaul, the second 60 MW unit is generating 55 MW, the third 110 MW unit is producing only 60 MW due to some modification work, the fourth unit (110 MW) is generating 90 MW and the fifth 110 MW recommissioned at the beginning of October is producing 110 MW. Thus the five sets installed capacity of 450 MW at Ennore was producing in October 305 MW, with the hope that by January the plant will be generating the optimum at 90 per cent. In the last week of November due to heavy rains and the mud and slush brought up by the mine, Neyveli was reduced to 250 MW, later to 120 MW and finally to 60 MW. This reduction was however made up by increasing generation from the surplussing reservoirs. The other source of power for the State is purchase from Kerala. In October, there was a review by representatives of the Boards of the 2 States at the meeting of the Southern Boards. At present Kerala is supplying Tamil Nadu 4.62 million units per day at 12.5 paise per unit. Tamil Nadu has requested for more power from Kerala and it was decided to review this question at the end of December when the Kerala hydel reservoirs storage position for the year would be known.

For the country as a whole, the ministry of Energy reported that thermal power generation during April-September increased by 6 per cent compared to April-September 1976. The generation of thermal, hydel and nuclear power together increased by 2 per cent during the 6 month period. Hydel power which declined from April to June picked up from July. There were no power cuts in Andhra Pradesh, Himachal Pradesh, Jammu and Kashmir, Gujarat, Kerala, Tamil Nadu, Bihar and Orissa. Two thermal units of 180 MW were commissioned in Uttar Pradesh and Madhya Pradesh bringing the total installed thermal capacity to 12,190 MW. In North Bengal, power rationing and fast generation are needed to meet industrial demands. For the Northern region power supply will improve with the commissioning of the 165 MW Dehar station in mid October. Haryana continued to suffer power cuts and shut downs seriously affecting its industries. The Managing Director of the National Thermal Power Corporation reported in October that the initial phase of the first super thermal power station at Singrauli, Uttar Pradesh, will go on stream by 1981. The Corporation is responsible for building and running all 4 super thermal power stations—which it lists as Singrauli, Korba and Ramagundam with an installed capacity of 2,000 MW each and Faraka

with 1,600 MW. The four projects with associated transmission networks are likely to involve a capital outlay of Rs. 3,000 crores. It will be noted that despite earlier Union government assurances that the location of the Southern Super thermal plant as between Ramagundam and Neyveli is under study (see Vol VI p 256) and is likely to be Neyveli (see Vol VI p 73), the October announcement of the Corpotation refers in a definitive manner to the Ramagundam location. This needs discussion between the State and Union government. It will also be recalled that the World Bank IDA has sanctioned a grant of $ 150 million for the first 600 MW plant at Singrauli and has completed its appraisal of the Korba project for a credit of $ 200 million for its first phase of 600 MW. A similar loan for Ramagundam it is reported is under negotiation. Similarly the OPEC Special Fund which has loaned $ 21.8 million to Singrauli is interested in its further financing. The Corporation plans to reduce the time period for commissioning the first phase of the plant from 72/84 months to 48 months and has already taken action on the main power plant equipment and coal handling facility for Singrauli. The Planning Commission approved in October the installation of a thermal power station at Bokaro and a pumped turbine hydel unit at Panchet Hill under the Damodar Valley Corporation. The Bokaro scheme involves installation of a 200 MW generator at a cost of Rs. 69.7 crores.

Water :

A new concern and subject for discussion between Tamil Nadu and Karnataka with regard to the unresolved Cauvery issue has arisen with the decision of the Karnataka government to build the Varuna Canal project which will be taking off from Krishnarajasagar on its right side to irrigate about 80,000 acres in that State. This project it is estimated will divert 25 tmc feet of Cauvery water annually from Tamil Nadu. To date 3 projects in Karnataka—Kabini, Harangi and Hemavathi have denied 75 tmc feet of water to Tamil Nadu. Instead of the minimum of 400 to 450 tmc feet of water received by the State annually, there is now a real danger of its being deprived of 25 per cent of this quantum and to that extent disrupting its agricultural life and occupations. Hence an all party conference on the Cauvery water dispute including the proposed Varuna project is planned to be held in November in order that there may be a common stand by all parties on this serious issue. The Chief Minister and the public works minister, attended on October 27 a meeting in Delhi with the Chief Ministers of Andhra Pradesh, Karnataka and Maharashtra on the project for bringing 15 tmc feet water from Krishna to the city. The agreement signed between the 3 states permits the State to draw not more than 15 tmc feet water in a year from the Srisailam reservoir between July 1 and October 31 through an open lined channel from Srisailam to Pennar carrying 1,500 cusecs. The Chief Ministers of Andhra Pradesh and Tamil Nadu will consult in November and on that basis the engineers in the 2 States will complete their investigations by one year, start the laying of the open channel during 1977–78 and complete it in 5 years. Andhra Pradesh will help in acquiring the land, facilities for construction of canals and for the maintenance of operation of the water supply system. Tamil Nadu will bear the cost of conveying the water from Srisailam to Poondi. The lined channel between Srisailam and Somasila and Madras

will be used only for Madras city water purposes. With this agreed supply, the Madras city drinking water problem becomes manageable. At present city's per capita supply is 10 gallons per day compared to 42 gallons for Calcutta, 47 gallons in Bombay, 48 gallons in Delhi, 63 gallons in Tokyo, 71 gallons in Paris and 116 gallons in New York. By 2,001 when the city's population will be 7.13 million and water requirement 463 million gallons per day, as against present availability of 100 million gallons per day. Within the state, plans for providing by September 1978 the 5,700 villages and hamlets which have no sources of drinking water or no potable sources were finalised in October jointly by the engineering wing of the Agricultural Department and the Tamil Nadu Water Supply and Drainage Board. It was decided to pool the 135 drills of the former and 65 of the latter for digging bore-wells in these villages, using for the first time geophysical instruments to identify the depth and strength of the sources.

Food Zone :

In October, the State government had discussions with the Union and some other State governments over means of mitigating the deleterious effects of the Union government's decision which declared the whole country as one food zone for movement of paddy and rice. The rise in retail rice prices by 20 paise per kg. in October is traced to this decision, which it is reported, was taken by the Union government without consulting the State ministers. In fact as noted in the last issue (p.632), the APC had recommended against it, and at the time of consultation the Tamil Nadu food minister was even against the enlargement of the Southern Food Zone to include Maharashtra and Goa. At a meeting of the food ministers of West Bengal, Bihar, Orissa, Assam and Tamil Nadu on October 10 in Calcutta, it was decided to request the Union government to treat the four Eastern States—Assam, West Bengal, Orissa and Bihar as one food zone and restore the Southern Food Zone. As a result of these representations, the food procurement and distribution system in the State was established under a detailed executive order which will be referred to under the agricultural development section of the editorial.

Transport :

The annual meeting of the Indian Road Transport Development Association—Southern Region—in Madras in October, was an occasion for reviewing the slow pace of rural road construction in the State and the decision of the State government to obtain a higher share from the Central Road Fund in order to construct roads, especially rural roads, more speedily. The government also reiterated its decision to give bus permits and tax concessions to private businessmen who undertook the laying of rural roads and the repair of panchayat roads.

Welfare :

The Madras Corporation launched in October a tree planting programme. With a target of 10,500 of flowering and foliage trees, the programme will continue till December. In addition to the 22 out of 34 traffic islands handed over to private firms and public sector undertakings for their upkeep, there is need for adopting more traffic islands and parks in Anna Nagar, Indira Nagar, K. K. Nagar and Ashok Nagar the newly developed areas. For the tree planting programme,

in addition to the existing 3 nurseries at Nungambakkam, VP Hall and Kodambakkam, 3 more nurseries are being established at Mylapore, Mount Road and Anna Nagar. On the prohibition front, the State government cancelled in October, 250 licenses for the manufacture of denatured spirit of the order of 18 lakh litres. Each litre could produce 3 to 4 litres of arrack. This is part of the drive to check illicit distillation of liquor, its sale and transport and distribution—rather than going after the illicit liquor consumers. Similarly the government has also launched a vigorous drive against the manufacture of aristams and other alcohol based indigenous medicines used as intoxicants. Many such licenses have also been cancelled. The government has also decided to increase the capacity of its 2 units manufacturing alcohol products like varnish and french polish in order to meet the entire needs of the State, so that private manufacture of these items could be completely banned.

National :

Fifth and Sixth Plans ;

October saw further developments in regard to the formulation of the Sixth Plan. The termination of the Fifth Plan on March 31, 1978—one year ahead of its normal life—is settled. In view of the unfavourable reactions and the silence of the economists in the country with regard to the proposal for a rolling plan, it is proposed to prepare a five year plan from 1978–79 to 1982–83 and similarly to add a year to the plan with every passing year. In this sense the Plan will be continuously a five year plan but the five year period to start with will be fixed and firm. The draft for the five years 1978–79—1982–83 must be ready by January. It will be based on 1976-77 prices, and will involve increased outlays for agriculture, irrigation and power and reduced outlays for industry, minerals, transport and communications. Additional resources will have to be raised for building buffer stocks of essential commodities and for expanding the public distribution system and for maintenance, replacement and modernisation of power and irrigation system, the shift to rural health programme and to primary, vocational, adult and non-formal education from secondary and university education. These are the new government's declared priorities. Against the known shortcomings of the planning procedures assuming unrealistic rates of savings, investment and growth, inability to allow for annual fluctuations in agricultural output, the lateness of mid term appraisals for effecting corrections, the new techniques proposed will (a) establish year by year targets for aggregate savings, investments and sectoral outlays within the 5 year span, (b) develop a new 10–15 year perspective plan to allow for investment decisions with long gestation projects, (c) enter corrections every year thus providing a continuous time horizon for investment decisions, (d) continue the Sixth Finance Commission's resource allocation for 1978–79, (e) leave unchanged the terms of reference of the Seventh Finance Commission which will make allocations for 5 years, (see Vol VI p 437), (f) also continue the Gadgil formula for Central plan assistance, while the formula is reviewed and changed and (g) implement the strategy for employment through a sizable increase in labour absorption in agriculture and related activities which means increased land productivity through irrigation, multiple cropping and

technology and time bound targets for the removal of unemployment, elimination of destitution, alleviation of poverty, reduction in disparities of income and wealth. Against this background, the Planning Commission set up on October 21 working groups to review the progress made in the Fifth Plan, to consider the main policy issues for the next plan and to suggest feasible targets for 1978-83 in agriculture and allied sectors. Each group comprises representatives of the department concerned, one from the *Agriculture and Rural Development* Division of the Commission and one from the *Perspective Planning Division.* In agriculture, the groups will cover command area development, minor irrigation, soil and water conservation and land reclamation, crop production, agricultural administration and education, animal husbandry, dairying, fisheries, forestry and agricultural statistics. In rural development the groups will study integrated rural development, panchayat raj, co-operation and rural credit, marketing and regulated markets and district development. Other working groups are at work on food processes, storages, warehousing, agriculture research and education, flood control and irrigation. Also a working group on railways has been set up to draw up a detailed railway development programme for five years. The practical problem here is the difficulty of developing a serious five year plan within the 6 months available. The working groups have been asked to make an interim report by mid November and submit the final report by mid January. The break up of the subject into small areas might help, but even so it is extremely doubtful if this timetable can be kept. The Union Planning Commission in a communication at the end of October to the States has established the following guidelines: (i) irrigation and power projects in an advanced stage should be provided with adequate funds for completion: (ii) continuing schemes in agriculture and related activities and small and village industries should be provided with funds at least as in the current year and allocations for quick yielding projects in those areas should be increased: (iii) other continuing schemes which will yield benefits in the next 2 or 3 years and are at an advanced stage of execution should be fully provided, while other schemes should be reviewed to determine their relative priority and if of low priority from the point of view of employment generation should be discontinued or rephased: (iv) the minimum needs programme particularly the provision of home sites for landless labour, rural water supply, rural electrification, market roads and rural health care facilities should be reviewed and if there are well thought out schemes and effective machinery for implementation, the financial provision for them should be increased over the 1977-78 level: (v) in rural primary education, emphasis should be on quality improvement and reduction in dropout rates as on starting new schools: (vi) new starts in irrigation and power should be given priority provided detailed feasibility studies are available in December 1977 for those to be started in 1978-79, bunching is avoided and the starts are phased annually over the next 5 years: (vii) adequate provision should be made for surveys and investigations for new projects especially in the irrigation, power and water supply sectors: (viii) on the non-plan side, due provision should be made for existing health, education and agricultural support services at optimum levels, along with proper maintenance and full use of all physical assets created in earlier plans such as irrigation power, roads, buildings and the support

services required by State public sector enterprises: (ix) a determined effort to raise additional resources for the public sector plan for 1978-79 so that a firm resource base is created for the next 5 year plan. This appeal is made to the Union ministers also so that outlays are not planned in excess of available resources and the plan for next year is based on realistic domestic savings and external resources and achievable growth. The States are requested to send their Sixth Plan proposals by November 20, the commission will finalise the plan by December 31, 1977 and have it discussed at the National Development Council in February 1978. As noted earlier, this is a tight timetable which will require quite an effort to be kept.

Prices and Anti-Inflation:

The index numbers of wholesale prices for September showed the first decline in prices by—0.4 per cent for the month, standing at 187.8 on September 24. Since March, the price rise has been 3.1 per cent and for the year 4.9 per cent. The biggest price decline during the month was in oil seeds (-2.6 per cent) and sugar (-2.4 per cent), followed by edible oils (-1.8 per cent) and fibres (-1.7 per cent). Cereals fell by -0.5 per cent, drugs and medicines by -0.4 per cent and cotton textiles by -0.2 per cent. Pulses prices shot up during the month by 12 per cent and the year by 71.3 per cent, with jute prices rising by 4.4 per cent. There is thus a decline in the wholesale price situation. The retail price index for greater Bombay for September maintained by the *Economic Times* shows however a rather sharp increase of 2.4 per cent for September and for the year 7.8 per cent higher. Here again the major price rises have been in pulses (60.6 per cent), vegetables and fruits (50 per cent), oils and fats (24. 8 per cent), meat, fish and eggs (11.1 per cent), medicine (9.1 per cent) and sugar and fuel (7.2 per cent and 7 per cent). The Union government continued its action in October to control prices. On September 30 it fixed stock limits of pulses, edible oils and vanaspati for wholesalers and retailers all over the country, fixed the retail price of mustard oil at Rs. 10 per kg. established a long term plan for importing edible oils under which STC has been directed to import upto 2 lakh tonnes of oil preferably under long term contracts, fixed the retail price of vanaspati at Rs. 140 per tin of 16 kg. as from November, and in various public pronouncements called upon industry and trade to maintain the prices of edible oils and vanaspati. Meanwhile because of the low stock limit of 500 quintals (as against the average wholesale turnover of 1,000 to 1,500 quintals a day), an artificial shortage of pulses began to make its appearance during the month. The government also increased cotton support prices by Rs. 63.90 per quintal and has had to meet 50 per cent of the unplanned resources gap of Rs. 390 crores of the 10 northern states and is readying itself to pay an additional DA to Union government staff which fell due to in September. This additional DA will cost the government Rs. 50 crores. Also with the prospect of falling prices because of the bumper groundnut crop, government through NAFED is planning to buy the crop at Rs. 160 per quintal. Another negative forecast is that Union budgetary deficit is expected to exceed the budget forecast of Rs. 94 crores due to (a) the repayment of Rs. 400 crores of compulsory deposits, (b) the fixing of retention prices for fertilliser units, allowing them 12 per cent post tax return and the reduction of urea price by Rs. 100

per tonne, involving a union subsidy of Rs. 150 crores and (c) the drawal of Rs. 800 crores of foreign exchange reserves, not being compensated by an import surplus to that extent, which means deficit financing, against which higher revenue receipts due to liberalised imports and some shortfalls in plan expenditures should be set off. As long range stable and anti-inflation measures, the government decided to give preference to the co-operative sector or civil supplies corporations and panchayats for setting up outlets for running a permanent public distribution system for essential commodities for mass consumption. In the meanwhile fair price shops run by private traders with vigilance committees to watch over them will function till the system comes fully into operation. Further the working group on productivity, efficiency and profitability in commercial banks has recommended performance budgetting for banks, involving a national plan for resource mobilisation, deployment of funds, business and manpower planning. It recommends a perspective (3-5 years) plan for the banking system in which for each bank, there should be an annual plan of credit budgetting, project planning, follow up and monitoring system. Functionally the credit budget will be an integral part of the performance budget and business. The Committee recommends that a suitable banking management information system (BIS) should be evolved to provide the data needs of the RBI and the individual banks for internal management and control. Besides a uniform system of credit, performance should be evaluated on the basis of productivity, special and sectoral social objectives and profitability. By 1980 the ratio of the banks owned funds to deposits should rise to 3 per cent from the present 1 per cent and to improve their capital base, 40 per cent of the disclosed profits should be transferred to reserves, free of taxation. The interest on additional cash reserves in excess of the minimum 3 per cent should be related to banks cost of funds and may be raised to 6.5 per cent for banks having total deposits of more than Rs. 400 crores and 7 per cent for others. Finally in October the Union government set up a study group on wages, incomes and prices to examine questions relating to minimum wages, the norms for its determination, the question of a uniform wage for agriculture, industry and services, organised and unorganised, urban and rural sectors, whether the minimum wage should be the same between different states, regions and employers; to examine relevant criteria for determining differentials between minimum and maximum wage and whether the ratio should be uniform, the criteria for determining the maximum income and its relation to maximum wages: to study the linkages between wages, incomes and prices, review of regulations governing DA and the fiscal, economic and other policies to be adopted for achieving the objectives on wages, incomes and prices. This is a vast mandate and the time period given of 6 months is an impossible one. In any case there is not the data for a comprehensive study of wages, incomes and prices. What the group can attempt is to start with the existing systems of minimum wages and study and recommend changes in minimum wages for different states for the agricultural rural sector, along with some theoretical studies on the relation between minimum wages and maximum incomes and their effect on prices. As an anti-inflation review, the group could run into opposition from workers and trade unions, unless it broadens out the interpretation of its mandate.

Indirect Taxes :

The Jha Committee on Indirect taxes presented its final report at the end of October to the government, confirming the conclusions of its interim report presented in time for the June budget. In the final report, its recommendations included: (a) the maintenance of sales taxes, not being replaced by a Union excise tax, but to promote more uniformity between States in their rates of sales taxes, a model law to achieve a uniform system of sales taxes is proposed: (b) at the present stage of development a centrally administered Value Added Tax (VAT) is not recommended but to reduce the cascading of taxes resulting from the levy of excise duties at different levels of processing and manufacturing, combination of sales taxes and a form of VAT at the manufacture level is proposed: (c) concerned over the inflation of industrial costs and consequently the working capital requirements and the higher interest payments that become obligatory as a result of cascading of taxes, a reduction or abolition of the 4 per cent excise duty on approved machinery that is imported is proposed.

The Economy and Industry :

A review of the economy and economic policy options in October by a group of economists resulted in several interesting conclusions: (a) the expansion of the public sector, using the mounting foreign exchange reserves: (b) rejection of private sector led growth, export led growth and the association of MNCs with the country's develepment: (c) raising the level of investment to 20 to 22 per cent of the gross domestic product and continued emphasis on heavy industry for self-reliance: (d) a new strategy for agricultural development and implementation of land reforms: (e) larger domestic resource mobilisation through appropriate pricing for the public sector: (f) withdrawals of subsidies weighted in favour of larger private sector concerns and checking of tax evasion: (g) an expanded public distribution system covering both urban and rural areas: (h) foreign exchange reserves to be used for development of power projects, fertilisers, shipping, nuclear energy and oil exploration and buffer stocks in cotton and edible oils. It expressed grave reservations on the concepts of 'rolling plan' both because it had not been properly debated and because it would dilute planning discipline and accountability. On industrial policy, it recommended definition of the basket of consumer goods for the country, pricing of capital, greater reliance for capital accumulation on the public sector and an ownership structure which would reduce concentration. On the industrial front, the overall industrial growth rate during the first 8 months, January–August, is a record 10 per cent, mainly due to the industrial units registered with DGTD and the substantial rise in the number of industries. The production of cement has risen by 144 per cent, synthetic detergents and diesel engines by 46 per cent each, electric fans and phosphatic fertilisers by 46 per cent, flour mills by 38 per cent, transformers by 37 per cent, sugar machinery 36 per cent. On the other hand aluminium industry declined by 21 per cent, machine tools by 19 pet cent, three wheelers by 17 per cent. The good overall performance is in no small part due to the co-ordinating and facilitating action by DGTD. Industrial unrest and power shortage resulted in the negative growth of 37 engineering units and the decline in aluminium and machine tools is due to power cuts. This together with large

scale industrial unrest is reported to have slowed industrial growth since April. The true position will be known when the Index of Industrial Growth for December is released. Now there is a further problem facing industries. With the massive diversion of resources to rural development, the Union government is in danger of running short of rupee resources which will impede industrial growth and with the government's decision against deficit financing, even foreign aid cannot help industrial growth because of the scarcity of counterpart rupee resources. Industrial retardation will cause serious shortage of industrial raw materials in the next 2 or 3 years and so impede development. In the coming month decisions will have to be taken to generate rupee resources to sustain industrial growth.

National Production Front:

Steel :

The expansion of Bokaro from 1.7 million tonnes to 4 million tonnes will cost more than estimated, whether carried out by MECON with the help of USSR or USA. In 1970 the expansion was costed at Rs. 520 crores, in 1974 at Rs. 950 crores and now at Rs. 1,200 crores, which will make the total cost of Bokaro (with the existing 1.7 million tonnes counted in) Rs. 2,000 crores. So far Rs. 945 crores have been spent on stage one and Rs. 400 crores on stage two. The Bokaro expansion will be completed by January 1979 and the cold rolling mill expansion for which the technology is to be changed and drawn from the US will not be completed till a year after the original schedule of 1981—that is, the end of 1982 and its cost may further rise. The steel plants report a shortage of coal stocks in October. BCC as well as subsidiary and captive collieries supplied adequate coal till July but from August shortages have appeared. The financing of the expansion of the steel industry is under discussion and the general view is that it should be from domestic sources, with foreign financing obtained from inter-governmental and not MNC sources. The expansion programme should be dovetailed with the national priority accorded to agriculture and should meet the increased domestic need for steel by mechanisation of farming, water management schemes, development of roads, and railways, the widening of the industrial base and regeneration of the rural economy. Steel surpluses which are value added should be exported. It is also considered that there is no need for further expansion of mini steel plants and new technologies should be directed to economies in material usage, while generating maximum employment. Because of wide technological differences between steel plants, in place of a uniform labour productivity index, departmentwise productivity ratio should be used with each plant's input-output ratios, utilisation percentages, cost details and material consumption rates being available both to labour and management. In October, the detailed project report on the Vishakhapatnam steel plant was submitted by Dastur to SAIL. This first coast based integrated steel plant with 3 million tonnes ingot steel capacity is to cost Rs. 2,000 crores, using a universal beam. In the first stage 1 million tonnes capacity will be developed in 52 months, and another 2 million tonnes in the next 32 months. It is proposed that the plant use the "backward integration" method under which it will start with the rolling mill and so start earning before being commissioned. The plant is to be constructed

completely with indigenous knowhow and machinery, except for the training of 80 persons abroad for the universal beam mill. It would also combine continuous casting and conventional ingot production and like Bokaro will have a 200 cubic metre capacity. Because of its coast location, it can export its pig iron and finished steel products and import needed coke. For its 2.43 million tonnes of saleable products, 6 lakh tonnes of wire rods and 5 lakh tonnes of light machine products and universal beams, it will use 4.5 million tonnes of iron ore from Bailladilia in Madhya Pradesh and 3.5 million tonnes of coking coal from Jharia Bihar Raniganj mines and 3 million tonnes of dolomites and limestone from Bagalkot and Jaggayapeta in Andhra Pradesh.

Crude :

In October, ONGC announced some important crude oil supply developments. The well taken up for exploration in the Diamond Harbour area off the West Bengal coast was spudded on October 7, the first since the exploration started in 1960. In 1975, three wells were drilled to start with and though not promising, the newly acquired data is reported to point to commercial hydro-carbon accumulation on Calcutta - Mymensingh regional gravity. India and Soviet geoscientists are engaged in an analysis of all this data in light of recent results in geochemical analysis and rock studies. Further a major new off shore oil strike was made in mid October by ONGC 65 Km South of the South Bassein gas field adjoining Bombay High. The oil well is producing crude oil at the rate of 1,175 barrels and 2,50,000 cubic metres of gas per day. Along with Bombay High producing 4,000 barrels a day and Bassein 2,000-2,500 barrels a day, India's offshore production is much higher than onshore production which averages 200 barrels a day and compares well with West Asian production records. ONGC also expects to start spudding in the Narasapur region of Andhra Pradesh by December and to intensify its survey work in the Cauvery basin, Kerala West Coast and West of Mangalore. Using Bombay High gas, the Union government proposes to set up at Uran a giant fertiliser complex—two 1,350 tonnes per day ammonia plants and two 1,800 tonnes per day urea plants. The projects will be use stripped gas to the extent of 2.5 million normal cubic metres per day from the gas piped to Uran and if more gas is available a third unit of identical capacity will be added to the complex at a later stage.

Coal and Minerals :

In a kind of cascading effect, the month long closure of the Indian Explosives plant in Bihar has resulted in a severe shortage of mines explosive and as a result coal supplies during October dwindled sharply. The two largest grade I coal suppliers—ECL and BCCL—had practically to stop their mining operations. The result is that industry has been hit and there is a scramble for scarce coal supplies by the railways, textiles, paper, sugar, steel units etc. It is to be hoped that explosives will be supplied to the mines in adequate amounts first by expanding their production from the Rourkela plant and secondly by imports if necessary—pending early settlement of the Bihar plant dispute. The Indian Bureau of Mines reports a decline in minerals production in July to Rs. 94.7 crores against June's Rs. 96 crores and 1976 July's 97.4 crores. With the base

of 1970, the index of minerals production declined in July by 3 points to 126. Mineral fuels accounted for Rs. 76.1 crores, metallic minerals Rs. 12.3 crores and non-metallic minerals Rs. 6.3 crores.

Cement and Shipping :

Mini cement plants, each of 100 tonnes capacity per day are being imported from West Germany and being developed by the cement research centers at Lucknow and Tiruchirapalli. Costing around Rs. 2.5 crores, these plants can be set up in areas like the North East where there are transport problems and where raw materials are not adequately available. On the Shipping front, the Union government announced that it is allocating Rs. 500 crores in foreign exchange for purchase of ships from abroad against a target of 7 million GRT. Also Rs. 36 crores will be used for modernising the Hindustan Shipyard at Vishakhapatnam, involving constructing a small building dock for 18,000 DWT capacity and improving existing berth and ship facilities. Its ship building capacity will then be raised from the 3 to 4 ships at present to 7 to 8 ships (1.62 lakh DWT). In 1976-77 it delivered (for the first time) 3 multi purpose and cargo vessels, aggregating 57,000 DWT and undertook ship repairs amounting to Rs. 2.8 crores. The Union government is planning to set up ship building yards at Paradeep and Hajira and improve facilities at the major ports. At present the Indian Shipping fleet comprises 330 ships with a tonnage of 5.24 million GRT. With the availability of foreign exchange and the international shipping market being a buyers' market at present, this is the time for the government to purchase ships from abroad.

Cotton and Fertilisers :

Cotton production during the current season has been placed at 65.70 lakh bales due to the push to increase production and good rains. Not only has the quantity increased but so have the quality and styles produced. In this context it is important that cotton prices should not be allowed to fall sharply as that will affect farmers and the next year's crop. The annual plan for 1977-78 has been changed and the allocation for cotton production enhanced. The Intensive Cotton District Programme is being extended to 8 new districts—Khandwa in Madhya Pradesh, Broach and Sabarkantha in Gujarat, Parbhani and Nanded in Maharashtra, Adilabad in Andhra Pradesh, Bijapur in Karnataka and Ramanathapuram in Tamil Nadu—all areas growing medium staple varieties under rainfed conditions. Distribution and seed production networks are being strengthened and the subsidy to seed producing agencies being increased along with doubling of the subsidy to the cotton grading centres. To attain the target of 70 lakh bales, the revised plan accelerates spread of high yielding hybrid cotton and introduces cotton cultivation in non-traditional areas. During the year the total area under ICDP will be increased from 10.5 lakh hectares to 13.15 lakh hectares. On the fertilisers front, as noted earlier, on October 11, the Union government announced the reduction of the maximum price of urea from Rs. 1,650 per tonne to Rs. 1,550 per tonne in order to reduce the cost of agricultural inputs to the farmers. It means a loss of Rs. 44 crores this year to the Union exchequer and Rs. 149 crores next year. With regard to fertiliser production—the total installed capacity for nitrogen production is at present 30.28 lakh tonnes (15.43 lakh tonnes in the public sector and 12.70

lakh tonnes in private sector and 2.15 lakh tonnes in the co-operative sectors) and projects under implementation would add 20.65 lakh tonnes (15.64 lakh tonnes in the public sector 2.73 lakh tonnes in the private sector and 2.28 lakh tonnes in the co-operative sector). In addition the government has under consideration 4 projects in the public sector and 2 in the private sector with a total capacity of 14.70 lakh tonnes. When all these projects are implemented, the country's total capacity would be 65.5 lakh tonnes of nitrogen.

Irrigation :

The Union government estimates that as a result of the special effort for the year, additional irrigation will be provided to 2.4 million hectares in 1977–78. The outlay for major and minor irrigation has been increased from Rs. 665 crores to Rs. 988 crores, as a result of which additional irrigation will be available to 1.3 million hectares, while the increase in public sector and institutional outlays on minor irrigation will lead to an additional 1.1 million hectares which will have irrigation. For the next five year plan 1978–79 to 1982–83, the Union ministry proposes to spend Rs. 7,000 crores to bring an additional 8 million hectares under irrigation as part of a strategy to bring under irrigation 17 million hectares in this period. For this purpose, the implementation of existing major and minor irrigation projects will be speeded up, new schemes taken up and a modernisation programme introduced to improve the efficiency of the system, of which a monitoring system would be an essential part.

Agricultural Production :

The good weather and rains all over the country assure a good kharif crop, which will not be marked by a fall of 10 million tonnes as in 1976–77 according to the Union minister. In fact forecasts of kharif foodgrains are of the order of 76 million tonnes (Rice 43.7 million tonnes, jowar 7.5 million tonnes, other cereals 15.5 million tonnes and pulses 4.5 million tonnes) which would exceed the record 1975–76 production of 74.2 million tonnes. In cereals, it is a matter of regret that the poor man's cereals—bajra, maize, ragi and small millets are declining in output and pulses do not register any increase. Groundnut will maintain the 68 lakh tonnes output and cotton between 65–70 lakh bales, as noted earlier. With the exception of Andhra Pradesh where the south–west monsoon was inadequate and delayed, all other States report adequate and abundant rains and satisfactory Kharif crop conditions. The Union ministry estimates that with the harvesting of the kharif crop, foodgrains prices are likely to decline, as against the upward pressure (plus 6.6 per cent) during May – July. Market availability of foodgrains continues to be comfortable throughout the country and the public distribution system is being used to check price increases. The number of fair price shops has been increased from 2.36 lakhs in 1976 December to 2.45 lakh in October 1977. The monthly release during January–July averaged 9.4 lakh tonnes, compared to 6.7 lakh tonnes in the comparable period in 1976. Because of the mounting stocks of foodgrains with public procurement agencies and the prospects of their further increase as a result of kharif procurement, the Union government has suggested to the States to reduce stocks by (a) meeting request for foodgrains by restaurants fully and opening more fair shops at weekly shandies and markets where wheat and milo can be sold without ration cards, (b) simplifying ration card

procedures and removing restrictions on certain individuals and (c) increasing the quantum of ration for adult labour without ration cards at all major irrigation and construction projects and opening 'work for food' programmes. The present buffer will rise to 23 million tonnes this kharif season and those measures and the repayment of the wheat loan to the Soviet Union and sale to Vietnam (see Vol VII p 633) and Iran will bring down the stocks. The issue of the whole country being treated as one Food Zone is still under discussion as noted earlier. West Bengal and Tamil Nadu are in particular very concerned and both States were still maintaining movement restrictions—in the case of West Bengal to ensure the success of its statutory rationing programme in the Calcutta—Midnapore area and in the case of Tamil Nadu to prevent a serious drain of its rice output to the neighbouring State of Kerala where it commands a high price. The Union government has initiated steps to boost farm output. In the case of oil seeds, 30.40 lakh hectares are being covered under several Union sponsored schemes, out of which 19.35 lakh hectares are under the intensive development programme, 4.19 lakh hectares under the extension of oil seeds to new irrigated areas and 2.56 lakh hectares under the soyabean programme. In respect of jute, an area of 3.44 lakh hectares is under Intensive Jute Development Programme spread over 18 districts in West Bengal, Assam, Bihar, Orissa, Uttar Pradesh and Andhra pradesh. The cotton programme has been reviewed. A review by the programme evaluation organisation of the Planning Commission shows that during the last year ending 1975–76, there has been a 5 fold increase in the areas covered by HYV paddy and a 3 fold increase in the case of HYV wheat. It recommends more of R and D and that seed multiplication and distribution arrangements should be reviewed state by state and brought fully into the programme.

Exports:

The ministry of commerce reports that export growth rate for the first four months, April to July has fallen to 10.5 per cent and will have to grow at 12 percent to reach the lower target for 1977–78 of Rs 5,750 crores and at 17 per cent for the higher target of Rs. 6,000 crores. It will be recalled that the export growth rate for 1976–77 during which the exports amounted to Rs. 5,134 crores was 27 per cent. The poor performers during the first four months of this year were iron and steel, jute manufactures, iron and manganese ore, leather, coal, marine products, silver, shellac and sports goods. The fall in ore exports was mainly due to reduced offtake by Japan which has reduced its steel production from 124 million tonnes to 100 million tonnes. Further there were signs of growing protectionism in industrialised countries and decline in world trade growth rate from 11 per cent in 1976 to 7 per cent in the first half of 1977. The items which exceeded their export targets in the first four months were engineering goods, chemicals, plastics, tea, coffee, tobacco, gems, and jewellery, cashew, silk and cotton, rayon, woolen and synthetic textiles. Jute exports also are picking up and an integrated plan for the rehabilitation of raw jute and jute products is being developed which will lead to increased exports of lighter fabrics of quality at competitive prices. Similarly marine products are expected to improve their export performances. The export of handloom textiles fell by more than 15

per cent in the first four months due to EEC restrictions. But a rapid growth of cotton handloom fabrics, particularly Real Madras handkerchiefs is recorded during this period, when 21 export product handloom projects have been sanctioned by the Union and State governments. Of the handloom export target of Rs. 237 crores for the year, cotton handloom readymade garments are expected to earn Rs. 140 crores. From this point of view the negotiations with EEC in which India and 31 other exporting countries are involved are important and are leading, as will be noted later, to a new multifibre agreement. As part of the sugar policy under review and consideration by the Union Cabinet, the export of sugar is likely to renewed and a quota of 2 lakh tonnes for the year may be fixed. Coal exports, on the other hand, may be suspended in view of the acute shortage of coal supplies within the country. The government is also reviewing export cash aid policy with a view to withdrawing cash aid to primary production, mass cousumption items and traditionals and to concentrate such aid on those items which are (i) employment generating, (ii) where world trade is expanding at a rapid rate and (iii) of a high value added nature. The export assistance under review has long been overdue and is comprehensive in that it includes cash assistance, duty draw back, credit subsidies, freight subsidies, replenishment licenses etc. The government has set up a high level committee under the chairmanship of the Secretary, Union ministry of commerce to recommend basic changes in import and export policies and procedures. In late October, the government decided to restore to export houses their earlier entitlement to import items not required only for export production. This is necessary to permit the growth rate of the export production by firms as well as diversification of the production.

Aid :

In October, Canada and India signed an agreement for a Canadian loan of Rs. 27 crores for the supply of Canadian fertiliser and fertiliser material to India during the current financial year. Also West Germany and India signed an agreement under which financial assistance totalling Rs. 135.72 crores will be given to India for mutually selected projects, the Industrial Finance Corporation, ICICI and debt relief. Also in October, India, Egypt, and Yugoslavia agreed that 15 more items ranging from carbon paper to electrical appliances for welding should be included under the common list for tariff preferences, allowing for 50 per cent reduction in customs duties in the 3 countries. The agreement also provides for the co-operative production of engines and spares for tractors, consumer and shipping electronics and manufacture of passenger coaches. The most important development in the aid field in October was the path breaking decision of Sweden to waive credits it has advanced to India and 7 other developing countries amounting to $ 200 millions, as a means of relieving their heavy debt burden in relation to their low per capita incomes. India owes Sweden Rs. 90 crores. This was followed by Canada which made a similar decision to write off its loans to the poorest of the developing countries, the details of which would be announced later. These two decisions will have reverberations in the area of international economic co-operation over a long term and for many countries.

International

Bangla Desh :

As stated in the last issue (p 636), on September 30, India and Bangla Desh reached a comprehensive agreement on both the short term and long term aspects of the Faraka issues. The agreement is for a period of 5 years. During the lean season, India will use the minimum for the last 10 days in April of 20,500 cusecs and for the rest of that period between 20,000 to 25,000 cusecs and in the extended five month period between 30,000 and 35,000 cusecs. Similarly the Joint Rivers Commission will study and report within 3 years on the techno-economic feasibilities of the alternative schemes suggested by either side, the linking of the Brahmaputra and the Ganga, the building of storage reservoirs at the source of the Ganga etc., for augmenting the flow of the Ganga as a long term solution.

World Monetary Reform :

During October, IMF conducted its 14th public gold auction at which 5.25 lakh ounces were sold at $ 115.14 per ounce. The profits of the sale of $ 60 million have been credited to the trust fund to aid 60 of the poorest nations. The Fund now amounts to $ 839 million. Towards the end of the month, the US dollar weakened against the Japanese Yen and Swiss Franc and gold. Gold thus attained a new high of $ 161.25 per ounce. With regard to the debt relief and debt cancellation on which Sweden and Canada as noted earlier have given a remarkable lead, EEC declared that it will not consider cancelling debts owing to its member nations. The US also announced that it would not cancel debts owing to it but will refinance debts of individual developing countries facing debt crises. It does not, however, support proposals from these nations for generalised debt relief.

GATT :

GATT's annual report for 1976–77 lays emphasis on the dangers of the protectionist tendencies in international trade and makes out the case for freeing trade channels both to ensure international financial stability and to counter the rising indebtedness of the developing countries. Capital flows are deferred trade flows, and if the debts are to be serviced, the debtor countries must be able to earn foreign exchange. The source of protectionist pressure are the stagnating markets and leads to a forecast of a gloomy outlook for the world economy, with high unemployment rates and low capacity use. The economy in the industrialised countries is recovering slowly with the growth of world trade of not more than 6–7 per cent for the year, with industrial investement yet to gather momentum. On October 19, UK lifted its reservation to allow a 0.3 per cent growth rate in EEC cotton yarn imports during the years 1978–1981. On this basis EEC will propose to its major suppliers the limit of the annual growth of imports of 8 "sensitive" items ranging from 0.3 to 4 per cent for the 4 year period. Based on last year's import volume, the 8 items are cotton yarn, cotton cloth, men's shirts, T-shirts, women's blouses, trousers and sweaters. In general it looks as if the Tokyo round at GATT will result in an average 44 per cent tariff cut and the final details should be settled by January 15.

International Nuclear Fuel Conference :

The International Nuclear Fuel Cycle Evaluation Conference (INFCEC) attended by 42 nations in Washington for 4 days concluded with the decision to establish 8 working groups to study during the next 2 years various nuclear fuel technologies in an effort to come up with an acceptable nuclear fuel cycle which is safe and would not spread nuclear weapons. The technical studies would not interfere with the nuclear energy programme of any country. India will serve as one of the 3 co-chairmen—the others being Canada and Egypt—of the working group charged with evaluating the availability of uranium, thorium and heavy water and will participate in the group which will study advanced fuel cycles involving thorium and uranium. There are some problems—Germany, France, Japan, USSR and UK are all working in the group on uranium enrichment, reprocessing a fast breeder technology but they have already chosen the forbidden plutonium route. This is one more attempt to devise a fair and just safeguard against use of nuclear byproducts as nuclear weapons, but it is an objective in which all countries must co-operate.

World Food :

World food forecasts are somewhat conflicting. USDA forecasts a record 1,436 million tonnes due to good US, USSR and Europe harvests. It also forecasts the possibility of world wheat trade exceeding 70 million tonnes. World wheat stocks are estimated at 96.3 million tonnes in 1977-78. The International Wheat Council estimates world wheat production at 390 million tonnes—the same as USDA—but places world wheat trade at 66 million tonnes. It expects total wheat supplies in the 5 major exporting countries—US, Canada, EEC, Australia and Argentina—to increase to 190.7 million tonnes from last year's 185.5 million tonnes. Imports by developing countries are forecast to reach 12.4 million tonnes, which is 20,000 tonnes above that in 1976–77.

Asian Regional Agricultural Credit Association (ARACA) :

The first General Assembly of the Asian Regional Agriculturial Credit Association meeting in New Delhi in mid October called on States and financial bodies to support the Association as a means of formulating a common region-wise approach in agricultural credit. Its target is to set the banks in each country to establish a branch bank expansion so that no villager would need to walk more than 8 kms to obtain credit and banking facilities. The Association is supported by 16 countries. This Asian body is one more facility to deal with the problem of the rural poor and the Union Government is extending to it its full support.

* * * * * * * *

II Agricultural Development

Paddy, foodgrains and other crops :

Paddy and other crop prospects in the State have brightened considerably as a consequence of the continuous rains in October. Mettur as noted earlier was full at its 36 metre (120 feet) capacity level and water had to be discharged at the rate of 25,000 cusecs during last days of October to accommodate the inflows of 65,000 cusecs and reducing pressure on the reservoir. So too Periyar and Vaigai reservoirs had surplus and all tanks all over the State—including those in the chronically drought prone areas like Ramanathapuram, North and South Arcot, Tirunelveli as well as in other areas like Chingleput and Kanyakumari were overflowing and what is even more important, the underground water table has been recharged and has risen. Some areas of Kuruvai paddy in Thanjavur —estimates vary from 15,000 to 65,000 hectares—were inundated, but this damage—if any—can be assessed only in November. The net effect of the rains however is to guarantee a bumper samba crop and navarai crop. Apart from a good paddy crop in Thanjavur district, an early start in about two thirds of the paddy area in the rest of the State is now being made, where, after the first crop, short duration navarai paddy can be grown. The standing samba paddy which was sown under semi-dry conditions will now yield a good harvest. Also the 3 lakh acres of upland paddy in the northern districts will produce well. The groundnut crop sown in early June in about 25 per cent of the area might be affected by the continuing rains in October. Also moisture congestion in lands sown with millets and cotton is a danger hindering the growth of seedlings and to counter this the Department is helping farmers to drain the excess water and apply fertilisers to boost the growth of the seedlings when soil condition are ready for it. But this good water supply situation for the year does not alter the long term problem that the farmers in Tiruchi and Thanjavur face as a result of the diversion of the cauvery waters by Karnataka. Hence the changing cropping pattern which uses less water referred to in Vol VII pp 299, 300 is continuing to be developed and propagated. In the Tiruchi district which for 3 years had no Cauvery water, drought resistant paddy, TKM 8 is being grown in some villages around the Pullambadi channels. Also the farmers have switched to hybrid KM-1, KM-2 cumbu and are exploring alternate cropping patterns. They have also reached self-sufficiency in raising their own hybrid KM-1, KM-2, cumbu seeds as a result of a crash programme over the last 2 years. In regard to pulses, the ryots in the area have turned to a new double cropping pattern wherein T-9 blackgram precedes the traditional coriander crop. Also tapioca farming is spreading with the location of the Ariyalur tapioca processing plant. Now they face second generation problems—simple threshing machines are needed as well as improved marketing of their abundant cumbu harvest and deep bore-wells to reach fresh water underground. The farmers in Thanjavur district have generally welcomed the Union Government's restrictions on rice movements in the hope that they can get better prices. It is difficult to assess the effect of the lifting of the restrictions on prices, as this year the cereal crop in the State may reach the target of 84 lakh tonnes compared to last

year's 74 lakh tonnes. The pros and cons of lifting movement restrictions are still under debate in the State, though the Union government's decision is firm and final. In a normal year of not so abundant rainfall there may be questions. Out of the State's 68 lakh acres under paddy for all 3 crops in a year, during the first crop season, 14 lakh acres are cultivated, of which 9 lakh acres are under flow irrigation and the rest by wells. If the rains are inadequate for the first crop there could be a sharp fall in output. The current rise in the price of boiled rice in October in Thanjavur, Tiruchi etc. is however due to the rains affecting the time of the harvest. From October 17, the State government introduced the scheme of collecting a levy on rice hulled by millers and stocks purchased by wholesalers in the State. Under the scheme, mills with a single No. 7 huller and doing cooly hulling are exempt, those with wholesale trading license or having a soaking pit and drying yard facilities or those having a monthly licensed capacity of 150 and more tonnes must tender as levy at government prices 20 per cent of the rice turned out by them, and those intermediate mills must tender a compounded levy of 18 tonnes of rice per year. Wholesalers will have to pay as levy 20 per cent of their paddy and 10 per cent of their rice stocks. Of the 14,000 rice mills in the State, 2,000 are large mills which must pay the 20 per cent levy. As a consequence of the single food zone decision, other restrictions such as the wholesaler not also functioning as a retailer, the ceiling limits on the stocks, a wholesaler in one district having to apply for endorsement to trade in another district or not being able to sell to another wholesaler, or the retailer having to levy only from the producer, the border movement restrictions —all those have been abolished. The levy system in the State announced in October is consonant with the Union Government's decision on a single food zone and has been worked out with its concurrence.

Research Results:

The recent (October) meeting of sugar Techonologists' Association was an occasion to spread the results of research which have developed early maturing high sugar content varieties in replacement of CO–419 and CO–997 which are in common use in this State and in the South generally. New varieties, CO–528, CO A-7701 at 10 months yield 8.99 tonnes of cane, 1.14 tonnes of jaggery and 0.88 tonnes of sugar more per hectare than the traditional varieties. In addition, the latter is drought resistant, and less suceptible to red rot disease which affects CO–997. These varieties should be sown early in the season and in all sugarcane growing areas of the State. Another demonstrated technique to improve the yield by harvesting at the point of maximum sugar content has been demonstrated by the Kallakurichi co-operative mill which involves extracting juice in small vials from various cane plots and analysing them in the laboratory for brix. Those with over 18 as brix are then established as ready for harvesting. This has increased the recovery rate by over 0.25 per cent. Another food crop which is in very short supply in the State and the country—pulses—can be increased by choosing the right type of pulse. In this State, after kharif, groundnut and horsegram are grown as dry crop. The Tamil Nadu Agricultural University demonstrated in the 1976 rabi season, where CO–1 horsegram, four types of green gram, five black gram varieties, four cow pea

varieties and one Bengalgram variety were tried out, the cow pea C-152 is better yielder and commands a higher price. Also cow pea PLS 370 and CO-2 did well in Pollachi area giving 560 and 449 kg. per hectare in 61 and 60 days as against 85 kg. from CO-1 horsegram.

Seri-Culture :

A large scale seri-culture development project, for which World Bank aid of Rs. 110 crores has been requested is aimed at modernising silk yarn production and stepping up quality and sale of quality yarn in Karnataka. Union assistance of Rs. 2.5 crores will be used to intensify mulberry cultivation and increase silk worm seeds. A reeling material bank is to be set up with a capital of Rs. 2 crores to ensure an economic price for the producers of silk yarn. The seri-culture farms in this State—in Coimbatore and Dharmapuri districts should become part of this expansion and development programme to meet in part the State's need for silk yarn which is of the order of 2,000 tonnes per annum.

Agricultural Co-operatives:

Village agricultural co-operative societies will be making short and medium term agricultural loans this year to the extent of Rs.135 crores as a means of promoting farm growth and development. 50 per cent of the credit will be for small and marginal farmers and landless tenants. Membership of the primary agricultual credit societies will be increased to 46 lakhs covering 90 per cent of the State's agricultural households. About 100 more societies will be launched to make for 100 per cent enrolment and making the total number of societies 3,600. Their share capital will be increased to Rs.48 crores and deposits to Rs.170 crores, with the State government investing Rs.1.5 crores in the share capital. To counter the consumption credit shortage faced by the farmers as a result of debt relief legislation (see Vol VII, p 307), 500 agricultural credit societies, 125 co-operative urban banks and 205 branches of the State and Central Co-operative banks are now advancing them jewel loans, it is reported, which in 1976-77 were Rs.40 crores and would be Rs.60 crores this year.

Animal Husbandry and Wild life:

A State and nationwide drive to increase the productivity and health of farm and milch cattle through a campaign against Foot and Mouth Disease has been launched under the All India Co-ordinated Research Project. The Regional Station at Bangalore is producing the necessary vaccine with Danish help and a scientifically planned prophylactic vaccination campaign is now under way. The State also announced in late September the setting up of 3 captive breeding centres for crocodiles at Sathanur for Rs.2.4 lakhs, and Amaravathi and Hogenekal to preserve and develop this fast dwindling species. Also at Bhavanisagar, a sanctuary for spotted deer is being developed and the Madras Zoo which is being taken over by the Forest Department is to be shifted to Vandalur where there is more space and freedom for the animals.

Tea and Coffee:

Tea production in the North picked up in July and August, the final figures for this period being reported in the next issue. Coffee producing countries in informal consultations agreed upon holding back supplies to maintain prices at the present level. In late October a meet-

ing of major producing countries in Latin America agreed to suspend the sales of the mild varieties of coffee and as a result a 20 per cent rise in prices—from $ 1.50 to $ 1.90 per pound is expected. India is one of the countries which produces the mild coffee used in the mixture. It is estimated that consumption for next year will be about 52 million sacks of 60 kg. each against the estimated 46 million sacks production. The effect on coffee export and export earnings in India will be beneficial.

* * * * * * * *

III Industrial Development

Salem Steel :

As noted in the last issue Vol VII, p 643 the planned capacity of the Salem Steel plant is to be increased to 60,000 tonnes at an additional cost of Rs. 24 crores compared to the original 36,000 tonnes at Rs. 116 crores. SAIL has also approved a proposal for the appointment of a technical adviser for the plant. Work on the plant is to be stepped up next year when Rs. 30 crores will be spent. By September 1981, the first stage—the manufacture of 32,000 tonnes of cold rolled steel sheets and strips at a cost of Rs. 127 crores—will go on stream.

Neyveli :

The government announced to the Consultative Committee of the Lok Sabha at the end of October, that Neyveli, for the first time in its history earned a profit of over Rs. 14 crores for the year 1976-77, during which time the output of lignite had gone up from 3 million tonnes to 4 million tonnes. (Because of the heavy rains in October, as noted earlier, towards the end of the month there was no slush free lignite resulting in a reduction of power generation from 250 MW to 120 MW on the 23rd of October and to 60 MW on the 25th. By the end of the month, with some rainfree days, lignite output was normal and power generation was restored). Also the government announced that Neyveli will be getting Rs. 22.62 crores of West German aid during this year for its expansion project aimed at raising lignite output from 4.5 million tonnes to 6 million tonnes per annum.

BHEL :

BHEL, Tiruchi, is working on the development of a "Fluidised BedCombustion" (FBC) boiler which would be able to use coal with very high ash content. While in some countries coal with 60 per cent ash content was being used in boilers, in India our coals have generally upto 45 per cent ash content and are in use in Korba and other thermal plants. Under FBC technology, coals with even higher ash content could be used and

a US firm has asked for use of BHEL technology in the use of high ash content coal in thermal plants. When given, this would be a case of reverse flow of technology.

SISI :

The Small Industries Service Institute has launched a modernisation programme for the aluminium utensil industry under the direction of a steering Committee composed of representatives of the trade, government, financial institutions, commercial banks and experts. The Institute's quick survey of the 150 aluminium rolling mills shows that (a) most units need modernised melting technology, annealing techniques in full utilisation, rolling processes and deep drawing methods: (b) the 2,000 aluminium manufacturing units in the State can save Rs. 30-50 lakhs a year by minimising wastes at various points of processing circles and utensils. At a one day industrial clinic and a 10 day exhibition, it is planned to discuss in detail the modernisation programme, improved customer satisfaction and exports, problems of raw meterial availability, finance and credit and extension of the industry to rural areas.

Sugar :

In September and October the sugar industry in the State faced two issues. First there was a pile up of 1 lakh tonnes of accumulated stocks valued at Rs. 23 crores, resulting in a decline in prices of free sugar from Rs. 270 to Rs. 230 per bag. Actually the price fall was due to the expectation that the Union government would decontrol sugar which would bring price further down and lead to increased exports, with a time lag as the international sugar market is not favourable. As at the end of October the Union government has decided to maintain dual pricing for sugar so the problem for sugar mills in the State is to liquidate their accumulated stocks. The second problem concerns the price offered by the mills to the canegrowers. From October, the co-operative sugar factories offered Rs. 125 per tonne to the cane growers. It is now necessary for private factories to follow suit in regard to their price payments to cane growers.

Cement :

The Cemet units in the State report production in September of 2.74 lakh tonnes, which is 91 per cent of their capacity. With this satisfactory production performance and the possibility of the power cut being now ruled out with the abundant rains and the filling up of all the hydel reservoirs, cement production should continue at this high level also for the rest of the financial year. The Union Government has also announced an increased allocation of cement for the current quarter to the State from 2.9 lakh tonnes to 3.27 lakh tonnes, so that cement availability in the State has begun to improve from October. This increased supply will be further helped by the increased central quota to the Union government departments to all four southern states at 1.50 lakh tonnes. The cement shortage experienced during the last quarter and its consequent price rice should now be corrected aud should help the small construction programme under way. If the Urban Land Ceiling Act is either suspended or prevented from holding up construction activities, cement offtake and employment opportunities should both improve.

Handloom and Khadi :

In October, the fourth export oriented handloom complex to produce goods worth Rs. 50 lakh per annum was com-

missioned. The project at a cost of Rs. 10 lakhs has 1000 looms, producing a variety of handloom fabrics including lungis and will employ 2,000 handloom weavers. Before the end of the financial year, similar projects will start at Kancheepuram, Erode and Karur increasing the exports of handloom from the 4 centres to Rs. 3 crores per annum. The 3 man committee appointed by the State government to recommend improvement of service conditions of handloom weavers presented its report to the government and on the basis of the report the government plans to introduce legislation on minimum wages (from Rs. 1.70 to Rs. 2.80 per metre) and security of service for the employed weavers. At the national level, it is expected that there will be some fall in exports from Rs.240 crores last year to Rs.237 crores for this year mainly because of the unilateral quota restrictions by EEC nations in regard to handloom and its made up garments. The Union government has doubled its outlay on handloom from Rs.20 crores last year to Rs.40 crores this year. The production of Janata sarees is to be increased to 75 to 100 million metres for this financial year. Similarly Janata dhotis are to be boosted in production. Some 4,00,000 weavers are planned to be brought within the co-operative handloom network this year. The Khadi and Village Industries Commission in the State reports an increase in the production and sale of Khadi and Village industries goods in 1976-77 by Rs. 134 lakhs and Rs. 273 lakhs respectively. Khadi output increased to Rs. 9.7 crores and sales to Rs. 7.52 crores in 1976-77. This provided part time and full time employment to 4.79 lakhs persons in that year compared to 3.92 lakh persons in the previous year. From October 2 to 15 and October 24 to November 9, a 20 per cent rebate on khadi cotton goods was granted, as a result of which Rs. 4 crores of goods were sold.

Leather:

Leather exports for the current year may not reach the target of Rs.350 crores because of the dull international leather market, the change in fashions with goat skins yielding place to cow hides, accumulated leather stocks in most countries and uncertain economic conditions generally. During the first five months, April to August, exports totalled Rs.103.89 crores compared to Rs. 132.71 crores in the corresponding period last year. The largest decline was in EI leather from Rs.44.02 crores in April-August 1976 to Rs.32.3 crores in April–August 1977, followed by finished leather and leather goods, with only foot-wear going up from Rs.72 lakhs to Rs 2.60 crores. At the same time the qualitative change in the leather industry and its export sector over the last 5 years may be noted. The percentage of finished and manufactured leather has increased from 25 per cent of total leather exports in 1972-73 to 50 per cent in 1976-77. And since finished and manufactured leather earns 150 per cent more than semi-finishsed leather, exports earning have increased from Rs. 103 crores in 1972–73 to Rs. 306 crores in 1976–77. The government policy and the enterprise of the trade are responsible for this sea change.

* * * * * * *

IV Education, Science aud Health

Educational Unrest :

October saw continuing unrest in educational institutions—in Delhi University, Himachal Pradesh University, Punjab University, Mysore and Bangalore Universities, Sri Venkateswara, Madurai and in the medical colleges and some of the arts and science colleges in Madras, Tiruchi, Coimbatore and Pollachi. The common expressions running through these unrest situations were strikes, processions and fasts and the general theme still seemed to be the freedom experienced after the emergency discipline and controls. One rather disturbing feature of the agitation this time is that some of the carefully planned and long term essential educational reforms—particularly the grading system are being called into question, and in the case of grading there is a step backward that some of the universities like Madurai and to some extent Madras are being forced to take. It is hoped that as time passes, attention will be concentrated on improving the welfare situation of students in line with what is necessary in higher education institutions and what the country with its mass poverty can afford. The Prime Minister and the Education Minister at the Centre and the Chief Minister and the Education Minister in the State are bringing all their efforts to bear to help restore peace in the educational institutions, as without such peace, "the system could not survive and no task of development was possible," to use the Education Minister's words. This calls for "Internal and self-imposed discipline by teachers and students, educational reforms, sympathetic and firm administration and restraint observed by lay and political elements." This is a complete and comprehensive programme and everyone in the Universities and society should join in making, it a reality. One cause for prolonged agitation by medical students, house surgeons and post-graduate medical students was against the project of the barefoot doctors (see Vol VII pp 311 and 393). This was unnecessary and anti-social—unnecessary because the state government had repeatedly said that Tamil Nadu will not follow the scheme and this was not explained to or understood by the medical students, and anti-social because the scheme has a long social and moral background history and is applicable to most of our States which are short of potential doctors for rural areas. The strike ended when the Chief Minister announced to the students that their demands not to implement the barefoot doctor scheme in Tamil Nadu will be met. Whether the government can provide jobs for all unemployed medical graduates will depend on government resources and the willingness of the graduates to serve in PHCs and sub-centres.

Educational Reform :

As incentive to increased and sustained enrolment in rural schools, (a) the mid-day meals scheme, (b) book banks, (c) in service and retraining of teachers and (d) residential facilities may be reviewed. (a) Mid-day meals in this State have been provided to 19.80 lakh poor pupils, including 1.6 lakhs studying in harijan welfare schools. Karnataka claims an average attendance in its rural schools of 80 per cent (which is good) and attributes it to the provision of mid-day meals, attendance scholarships and supply of free books and slates. Kerala

also uses the mid-day meal scheme as a good incentive. In this connection it is of interest to note that Tamil Nadu, Karnataka and Andhra Pradesh have the same percentage of educational expenditures to the total budget, (they are 22.1, 21.7 and 22.3), while Kerala's percentage is a high 27.1. (a) The free supply of books is certainly an incentive but the book banks attached to rural primary schools do not seem to serve any purpose. In this State, it is reported that 7.5 lakh books are to be placed in the high school banks and 19.9 lakh books in the elementary and middle schools—all at a total value of Rs.74.69 lakhs. There are certainly better ways of spending this money, through increased free provision of books and slates. (c) With the revision of the syllabus and modernisation of the science curricula, the training and retraining of teachers by the SCERTs in the four States has became a normal feature. The end purpose of these courses is to increase the holding power of the rural school and make it cater to the need of the rural child. From this point of view, this retraining activity should became a routine activity without much public relations and fanfare. (d) Residential types of schools are rare at the rural primary level, but where they exist, as for instance the ashram schools in the tribal areas, they are a means of bringing children to schools whose homes are scattered over a wide and inaccessible region. There is need for review of the extent to which these incentives are succeeding in attracting and retaining rural children in schools and the manner in which they could be made more effective. The Union governmont has announced the establishment of a 30 member expert committee to review the + 2 stage curriculum and syllabus and propose in it further improvements as may be needed. Similarly the State government's syllabus Review Committee for both the 10 year school and the + 2 stage had its first meeting in October and decided not to reduce the syllabi just for the sake of reduction and to look at the need for new mathematics.

Adult Education and Mass Media:

As a follow up of the SITE programme, rural TV is operating in Raipur (Madhya Pradesh), Jaipur (Rajasthan), Gulbarga (Karnataka) and in recently inaugurated Hyderabad (Andhra Pradesh). Similar stations are to be set up in Sambalpur (Orissa) and Muzzaffarpur (Bihar). Putting together the many studies on SITE's functioning and impact to guide this rural TV programme, the following facts emerge: (a) as far as agriculture is concerned it did not have a positive impact on farming practices: (b) there is the danger that rural TV will be taken over by the urban elite and become simply "sunday movie TV": (c) the number of sets is inadequate. In 430 villages in Andhra Pradesh there are 470 sets, whereas in Hyderabad city alone there ara 8,000 sets: (d) the range of the transmitters is low (75 km) and can cover only 1,000 villages: (e) it is difficult to get a clear view of the rural audience profile and their specific needs: (f) education, poverty, and ruralness are not barriers for success of TV: (g) TV can inform and instruct but cannot produce or induce change: (h) co-ordination between development agencies is absolutely vital for rural TV and this is difficult to achieve. There is serious doubt whether black and white TV will have any real impact on illiterate or neo literate rural audiences. The same message can be got across at one fourth the cost by a good broadcasting system.

From this point of view, the new Farms and Home broadcasts by "the Farm School of the Air" started by Madras AIR on October 2 have potential. It is addressed to young progressive farmers every Wednesday and at the end of each 3 month course, merit certificates would be issued to the farm students. Three such programmes are being broadcast from Tiruchi (see Vol VII p 526), Coimbatore and Tirunelveli. The Madras programme will cover the districts of Chingleput, South and North Arcot, Dharmapuri and Pondicherry. Radio rural farm programmes are being broadcast on Tuesdays and Fridays, using specialists from the government development departments and on other days interviews with farmers and specialists, symposia, quiz, plays and discussions on agriculture are being broadcast along with weather bulletins. Home programmes for housewives cover nutrition, child care, first aid and public health. Also special education programmes are broadcast for school dropouts. Bombay TV with the help of the Bombay social Education Committee inaugurated in October, a non-formal education programme for industrial workers in the form of TV aimed at developing knowledge, resourcefulness and skills to help them understand and solve their daily work, social and family problems with confidence and self-reliance. In the State, the government is assisting the Tamil Academy to bring out the second edition of the Tamil Encyclopaedia at a cost of Rs.70 lakhs. The 12 volume publication will make available to adults information and knowledge on a wide range of problems and issues concerning the individual, family, state, nation and the world, which they require.

Technical Education:

The Union government is establishing 5 new advanced vocational training institutes at Bombay, Calcutta, Hyderabad, Kanpur and Ludhiana in the next four and a half years with assistance from UNDP. The Institutes which will give training for upgrading of skills and industrial and production specialisation will be modeled after the Institute in Madras. They will accelerate and diversify industrial development by making available to industries some of the highly skilled workers and technicians who are in short supply. They will perform a double task – providing upgraded skills for employed industrial workers so that they can meet the changing needs of industries for different types and higher levels of skills on the one hand and enhancing the general relevance of training provided through established ITIs in industrial and manufacturing methods.

Science:

In October the reconstituted National Committee on Science and Technology was inaugurated. Its Chairman stressed the need for autonomy and social responsibility of the scientist, and called attention to the fact that despite the fact that R and D allocation has been raised from Rs.27 crores in 1958 to Rs.400 crores in 1977, the final clause of the science policy resoultion which sets out "to secure for the people of the country all the benefits that can accrue from the acquisition and application of scientific knowledge" had not been put into effect. Hence tackling poverty and ending unemployment are the main tasks of science. For this the idea of *swadesi* must regain its place in science, and the need for simple technologies, simple machines and tools and the

assimilation of simple science for the development of industries in the rural areas must be emphasised. To end unemployment in the rural and hill areas, available local resources should be assessed and new uses found for them. Many agricultural resources now being used on food or fibre can be used to produce a host of chemicals. Cottage industries can be built around hides and skins, oil seeds and bamboo, poultry and bee keeping. Rural sanitation will eliminate most of the tropical diseases and science and technology can find simple workable devices for waste disposal. There is also need for further funding of basic research in universities. On the energy front, there should be more exploitation of our hydro-electric potential and large scale research on solar energy. The question of CSIR re-organisation was touched upon and the aim of ensuring co-ordination and avoiding duplication of scientific research while ensuring that each unit's autonomy was more meaningful was stressed by the Prime Minister on this occasion. What this means in operational terms for the CSIR and its laboratories will be seen in the coming months.

Health:

On October 2, the rural health scheme (see Vol VII p 393) was inaugurated all over the country, for which a sum of Rs. 4.5 crores has been set aside for this year and Rs.13 crores for next year. In its first phase, the scheme would cover 80,000 villages under 777 PHCs, benefiting 80 million people. Each PHC will have 3 doctors instead of the present two, the third being from one of the indigenous systems or homoepathy. Besides, one male and one female multipurpose worker will be provided for every 5000 persons. As noted earlier, in this State this scheme has been modified and fully qualified medical graduates, are being used to provide medical and health care to the villages. The Union government has also taken steps to intensify the family planning programme, after the recent neglect it has suffered. It has asked all state governments to use the incentive programme to promote free and voluntary population control. The State government has also decided to establish 20 bed leprosy wards in all district headquarters hospitals. The first one will be opened in the General Hospital in Madras at a cost of Rs. 95,000. The disease is being tackled by mass treatment supplemented by a case detection programme. A study programme in Tiruvallur on the effect of BCG in controlling the disease is under way and a sum of Rs.1.5 crores is being spent annually by the Union and State governments on control measures. The government has also started a campaign of oral hygiene—free dental check up for college students. Kilpauk Medical Hospital is providing this mass dental check up of students and city college students in batches are being checked under this programme.

* * * * * * * *

V Employment

Employment planning for the first year of the Sixth Plan, 1978–79 will be based on area plans for 2,000 blocks. These area plans will identify activities suitable to a particular area, which are capable of absorbing surplus labour for which supplementary funds over and above the sectoral investment funds will be available. Major investments–basic industries, major irrigation, power, transport and other infrastructure will be on the basis of national or regional priorities. But the major part of the investment in agriculture minor irrigation, animal husbandry, forestry, fishing, marketing, processing, cottage and small industries, local infrastructure and social services will be within the area plans which will have a high works component; which can also absorb a large proportion of surplus labour with a small additional investment of Rs.1–2 crores per block over a 3 to 5 year period. The increase in agricultural employment will be a function of irrigation, multiple cropping and improved technology. This means some regulation of modernisation and tractorisation. The increase in agricultural employment envisaged in those area plan is technically feasible. On this basis, the Planning Commission estimates that 70 million jobs will be created in the next 10 years to reach the objective of eradicating unemployment. This estimate is based on NSS data which show in its 27th round (1972–73) that the number of unemployed and underemployed, is the equivalent of 19.4 million people being wholly unemployed. The labour force is estimated to be increasing at 5 million per annum and so the unemployed backlog is 21 million. To this should be added the 50 million who will enter the labour force in the next 10 years giving the total for the 10 years 70 millions. NSS data also show that out of 19.4 million unemployed in 1972–73, 15.8 million live in rural areas. Hence the major thrust of the employment programme will be in agriculture and allied sectors. The Technical Manpower Bulletin of CSIR for April and May 1977 reports that corporate employment in the public and private sectors in the country increased by 3.2 per cent per annum during 1975-76 while the stock of scientific and technical personnel increased by 11.1 per cent during that period. In 1974, 56,533 vacancies were notified, with engineering leading at 15,224 followed by medicine 7,313 and natural sciences 4,663 and agricultural and veterinary science trailing at 2,062. Compared to 1973, 1974 saw a 30 per cent drop in employment from 83,633 to 56,535, the biggest drop being in engineering. Tamil Nadu 1974 vacancies amounted to 2,186 with the largest percentage in medicine (43) followed by engineering (38.7). The number of job seekers in 1974 is composed of those registered in the exchanges and those who graduated from the Universities. For the year 1974, the number of job seekers was 5,24,920, the number of vacancies being 31,629 and the percentage of vacancies to the number of job seekers was 6. The largest number of vacancies was 10,000 for teachers, followed by medicine 4,258 and the others at a little over 1,000. A general conclusion of the study is that a continued monitoring of imbalance between jobs and job seekers, particularly in specialised fields can ensure that valuable skills in which there is great interest are put to appropriate, if not optimum use.

* * * * * * * *

VI Other Items

AASSREC:

The Second Annual Conference of the Asian Association of Social Science Research Councils (AASSREC) was held in Seoul, Korea from October 4-8 at which 16 Asian countries and UNESCO were represented. There was a great deal of commonality between the countries in the matter of social science teaching and research in regard to imbalances, shortages of personnel and funds etc. It was decided to execute two inter-country projects—one on the role of the social scientist in national planning and the other on bureacracy and national development. The next conference of AASSREC it was decided would be held in Manila, Phillippines.

IAEA :

The thirtyfirst annual conference of the Indian Adult Education Association was held at Rajasthan Vidyapeeth, Udaipur from October 8–10 on the theme "The Role of Non-Formal Education in Integrated Rural Development". The Conference was attended by over 400 delegates from all over India and about 50 international adult educators. The Conference decided to intensify its efforts (through its 120 member associations) in sharpening the process of non-formal education for drop-outs, for farmers, for women and for youth in the rural development programmes. The programme was also well illustrated by the work in the villages being carried on by Rajasthan Vidyapeeth and Seva Mandir which the delegates visited. The Conference also discussed in depth the Union government's National Programme of Adult Education and pledged to support it fully.

International Council of Adult Education and International Forum:

The fifth meeting of the International Council of Adult Education was held in Udaipur immediately after the National Conference—on October 11 and 12. It was attended by over 40 national associations. It surveyed the development of adult education in the major regions Latin America and the Carribean, Europe, North America, Africa, Arab lands and Asia and decided to strengthen its regional offices in these areas. It also decided to run an international conference in 1978 in Holland on Adult Education and Peace Research and a seminar on relations between adult education associations in socialist and non-socialist countries of Europe. The major programme launched was one in participatory research. Here adult education is taking the lead in breaking the traditional relations in research between the researcher and the researched and at the planning and execution stage is ensureing that the researched also becomes the researcher. For Asia, the co-ordinating centre of the programme will be the University of Madras. The next meeting of the Council will be held in San Jose, Costa Rica in the summer of 1978. The International Council meeting was followed by a 4 day International Council/ILO international forum in which 60 labour leaders and adult educators participated to discuss the role of workers association in Integrated Rural Development. The major finding of the forum was that the cause of rural poverty was the unorganised nature of the landless agricultural labour force and that the first step should be to organise them and this was the task of the workers' associations.

UNESCO and ISSC :

UNESCO organised a consultation in October and on the contribution it should make to the United Nations Third Development Decade and to the New International Economic Order. The main thrust of the consultation was that UNESCO should undertake prospective studies that the shape and Scenarios of reformed and restructured education in the eighties and nineties, and on this basis help countries democratise their educational systems, modernise them, link them with the employment imperative and promote a commitment to international understanding, peace and human rights. At the same time, in UNESCO headquarters, the International Social Science Council had its Annual Conference and the General Conference of its Standing Committee for Co-operation between National Councils and Analogous Bodies. The Council decided on its programme for 1978 and the following years and the Standing Committee reviewed the stage of development of its regional bodies, of which AASSREC is one.

Associated Chambers :

The Associated Chambers of Commerce and Industry held its annual workshop on the mid term review of the Economy at New Delhi at the end of October. The workshop devoted as much attention to long term problems of the Economy, what its industrial policy should be, what is the future of Heavy Industry, what is the relation between large, medium and small scale industry, between industry and agriculture, as to the year's sectoral review of the rate of growth, the state of poverty and destitution, agricultural, industrial and foreign trade trends and savings/investment ratio and employment and planning. The Planning Commission member who inaugurated the workshop used the occasion to state the government's thinking on all these points, which if continued will constitute a major gain.

Meenakshi College :

Meenakshi College inaugurated its NSS programme and celebrated the UN day in mid October. To commemorate both, the college started a number of social welfare projects—literacy classes, feeding the poor, visiting the sick in hospital and serving in the slums. This is one of the youngest colleges in this city and is fast developing into a leader in the academic field.

Executive Council of MIDS :

The Second Meeting of the Executive Council of the Madras Institute of Development Studies was held in the Seminar Room of the Institute on Monday the 17th October 1977. The Council reviewed the building programme in respect of the additions and alterations to the Institute building and the negotiations for the purchase of the property at No. 11, Third Main Road, Gandhinagar, Adyar. It also noted the staff appointments and salary adjustments made under the old regulations and decided to circulate the particulars to the members of the Governing Council. The Council reviewed the outline of the budget estimates and staffing pattern for the Sixth Plan starting in 1978-79 and approved these. The Council authorised the Director to forward the document to ICSSR. The Member-Secretary stated that no change in the programme of research as approved by the Governing Council at its meeting in March 1977 was contemplated.

University Events :

There was the monthly meeting of Syndicate which in addition to reviewing and approving academic matters for the month prepared for the meeting of the Academic Council. The Academic Council met on October 31 and approved new programmes and syllabi for the ongoing graduate and post-graduate courses. Its important decision was a review of the proposed restructuration of the under-graduate pattern from 1980-81 and approval with some modification of the pattern which include (a) foundation courses (b) core courses, (c) CSS and (d) supporting courses.

November Development Seminar :

The paper "Women in the Sixth Plan" written for the November Seminar by Mrs. Y. Shunmugasundaram together with a summary of the discussion at the Seminar appears as the first article.

Second Article :

A paper on "Problems and Perspectives of Secondary Education" appears as the second article.

Book Review :

A review by Prof N. Subba Reddi, Madras University of the MIDS Publication No. 13, 'Tribal Welfare in Salem District' by S. Ramanathan, appears in the book review Section.

The Role of Women - A Tamilnadu Perspective

By

Y. SHANMUGASUNDARAM

Madras

I

This paper is mainly concerned with the economic role of women, the theoretical aspects relevant to the discussion and an appraisal of some of the important facets. The role of woman as a home maker and dispenser of a variety of duties traditionally enjoined, does not fall within our purview. Until 1975, there were few studies on women and most of them of a historical nature and the International Women's Year focussed attention on their contemporary picture in all countries. Heavy reliance on literary Sources for such studies inevitably results in contradictory conclusions. According to Manu, the ancient law maker, there can be no freedom for women. But literature, ancient and recent has abundant proof to the contrary. There has been a change in the methodological approach to the studies on women in the light of field studies. Yet the coverage is not comprehensive enough. Researchers often meet with the stumbling block of non-availability of adequate information on many facets of women, including, the urban educated women—a field where one would expect relatively better information. A perusal of the Select Bibliography on Women in India compiled by the Research Unit on Women by SNDT Women's University, Bombay (1976) only reveals the obvious fact that not much is known about the state of the majority of women all over the world and more particularly in India. [1] It looks as though the euphoria of the International Women's Year is vanishing into a nostalgic dream and this paper perhaps may help to sustain interest in this field.

II

Some Methodological Issues in Studies on Women :

Appraisals on Women's role have to be in specific segments, differentiated by socio - economic and locational characteristics as well as by the capacity for adjustment to the cultural, social, political and economic processes. Hence, a mere macro - analysis revealing the participation of women in purely quantitative terms is inadequate for a proper study. Women are looked at as a homogeneous group by the statisticians, law makers

1. "Review on Women", Economic and Political Weekly, 6 November, 1976, p. 1762.

and policy makers with the result that popularly held notions about women in the society at large are often off the mark. There is need for a fundamental change in the approach through methodological adaptations. Particularly, women's economic roles and their opportunities for participation in economic activities cannot be studied in isolation from the state of development of the society, the prevalent socio-cultural attitudes towards women's role in the family and outside of it and the social ideology with regard to the "basic components of status."[2]

Change is an inevitable process and no doubt considerable change has come over women in India. In any culture changes do not occur in all aspects of life with the same speed. Change in one aspect leads to change in other aspects, because the individual components in a culture are interlinked. That which is hardest to change is the core structure of religion and society. Material culture and economic organisation, form the outer components of culture and are changeable with certain stimuli. Thus maximum change is brought about in these spheres, and the core structure comes under pressure of change ultimately. A recent survey [3] sought to assess the differential changes in various aspects of urban life. Its results reveal that Indian women accepted change in the tertiary and secondary fields like dress' education, occupation, social behaviour etc. But there is no significant change in the core values such as attachment to tradition, devotion to husband, religious attitudes etc.

The extent of change in Women's attitude to life studied in another context [4] presents an optimistic picture of rural women. Thoughtful in their reflections on life, the strong women in rural environment enjoy their roles. "Whether it is those from the tribal women, the Rajput women or the Women of the landed gentry of the South there seems a gusto, a temparament that suggests strength, a sense of equality, if not superiority over men."[5] This view substantiates the "Women power hypothesis", that the "masculine system', is alleged to be merely a theory, and "in practice" male power is controlled by hidden female power (wives, secretaries, assistants and mothers). There is an apprehension in some circles that if men were to lose the "facade of power"[6] they would have nothing else.

There has been thus much image. building of women in India as elsewhere. Practically all doors are open to them. Legal disabilities have been eliminated. The convention of equal pay for equal work for all has been adopted. But women can hardly feel that "they had

2. ICSSR: Status of Women in India: A Synopsis of the Report of the National Committee (1971-74), New Delhi 1975; p. 59.
3. A Random Survey of 120 Women in and around Hyderabad. See B.S.S. Rao "The Changing Indian Women". "Yojana" Sept. 1975.
4. DEVAKI JAIN (Ed): Indian women Government of India. Ministry of Information and Broadcasting, Janury 1975.
5. Ibid. p.xx.
6. HOWE, F: Women and the Power to Change, New York 1975, p. 127.

indeed arrived". [7] The majority of women are still in the old routine. An approach to the problem of women has to necessarily and correctly comprehend the dynamics of our society in order to place them in a proper perspective. Many random studies have been made by the Government of India and other agencies. There is a plethora of variables, statistical tables, sample surveys and cursory analyses. But they give only a "watered down" [8] picture of the plight of Indian women.

III

Demographic Profiles in Tamil Nadu

As per the population projections for 1977 by the State Planning Commission there are 46.95 million people in Tamil Nadu with 23.74 million males and 23.22 females which works out to 970 females for every thousand males. The situation would be no better in 1986 with the same sex ratio, which measures the balance between males and females in the human population. Social, economic and community life is affected by large imbalances in many ways. This decline in sex ratio is a recent phenomenon for Tamil Nadu whereas there has been already a similar continuous trend in the past three quarters of the century in almost all other States in India (See Table 1)

TABLE 1

COMPARATIVE POSITION OF SEX RATIO IN INDIA AND TAMIL NADU 1901-1971.

Sex Ratio.

Year	Tamil Nadu	India
1901	1,044	972
1911	1,042	964
1921	1,029	955
1931	1,012	945
1951	1,007	946
1971	975	932

Source : Shunmugasundaram, V. et al : *Report of the Task Force on Human Resources and Social Change for Economic Development,* 1972–1984, Vol. I (Mss) (Madras, 1973) p. 27

7. TARA ALI BAIG (Ed). Women in India, Government of India, 1958, p.23.
8. JASODHARA BAGCHI : "Killed with Kindness". Economic and Political Weekly, (Bombay) 24th Jan. 1976, p. 101.

Thus the male proportion of Indian population has been on a steady increase since the turn of the century. The figures for the sex composition of urban and rural population are not different either from the general trend as may be seen in Table 2 below.

TABLE 2

RURAL AND URBAN SEX RATIO IN INDIA AND TAMIL NADU A LONG TERM COMPARISON

	INDIA			TAMIL NADU		
Year	Total	Rural	Urban	Total	Rural	Urban
1921	955	969	840	1,029	1,633	1007
1931	950	966	832	1,027	1,034	996
1941	945	965	825	1,012	1,017	990
1951	946	965	853	1,007	1,015	985
1961	941	963	845	992	1,003	963
1971	932	—	—	978	990	951

(Source: Census Report 1971. Vol. I p. 19, 1971).

Except Kerala, Orissa and Manipur all the other States in India are female deficient States. In most countries of the world there is a surplus of women resulting in serious social stresses. India presents a contrast sex–ratio wise and faces more problems thereby. Except being identified as a characteristic of Indian demography this deficiency of women has not received adequate attention on the part of Census authorities, demographers and policy makers. In the earlier censuses, some feeble attempts were made to explain this social feature. Demographers have not taken cognizance of this fact. An even more steep decline would not perturb many whose main focus is on the control of population. But this vital issue of unfavourable sex ratio has to be explored in terms of social biology and sexual psychology. Particularly, it reflects the imbalance among the endogenous castes which are really closed matrimonial groups. [9]

Various explanations have been given like the higher underenumeration of females, the marked preference of parents for sons, the neglect of girl babies, the general neglect of women at all ages, the adverse impact of frequent and excessive child-bearing on the health of women—especially those in the reproductive age group-and the higher incidence of certain diseases in women. All over the world

9. GYANCHAND: Population in perspective (New Delhi 1972) p. 75

more boys are born than girls. Owing to phenomenal improvement in public health and medical facilities, mortality has been cut down to a great extent. But there is differential mortality rate for males and females with a higher proportion for the latter. This is generally attributable to the differential improvement in health conditions. An enquiry into the causes of decline in sex ratio, therefore, leads to the basis of differential health conditions. There will be few to contradict the fact that neglect of women in India particularly on health grounds is a persistent phenomenon.[10] The Census report of 1921 points out that the high mortality among women might have been due to the fact that in addition to the ordinary tasks of the house, on them fell the duty of nursing the others even when themselves ill." There was an influenza epidemic in India in 1918 which resulted in a considerable decrease in female population and a negligible increase in male population. The excess mortality of females was four times that of males.[11]

Female mortality is of three kinds (1) female infantile mortality (2) Maternal mortality and (3) Pregnancy wastage. All three types are in the low income groups. Pregnancy wastage includes abortions and still-births and malnourished mothers. It was as high as 30% in 1972. Main causes of maternal malnutrition are iron deficiency and anaemia. Higher birth orders and frequent pregnancy lead to protein malnutrition. 10-20% deaths are due to nutritional anaemia and 16% to pregnancy complications and morbidity.

The remedy lies in providing women with greater access to Health Services. The inadequacy of services particularly in rural areas is too well known. But even such poor facilities are not properly utilized. The utilization rate ranges between 5% to 50% in the various states of India. Among the causes for underutilization such as apathy of staff, the status barriers between the doctor and low socio-economic group etc., particular mention is to be made of the absence of lady doctors in many public health centres. Provision of domiciliary maternity service must be an integral part of the Health Centres in rural areas. An important aspect of the present day Public Health Services is the emphasis on curative services rather than on preventive services. Whatever preventive services are available are urban oriented. Costwise, prevention is only one third of the cost of cure. Further, we note a difference between hospital facilities in rural and urban areas. Only 10% of the hospital beds are meant for 80% of the population of rural areas.[12] Provision of maternity beds is short of the requirement; only 17% of the total hospital facilities is for provision of maternity medical facilities and standards of public health service reflect women's life expectancy. Kerala stands first in the provision of these facilities and it has the highest life expectancy and the lowest infant mortality. In Tamil Nadu considerable attention is paid to these services and there is a definite increase in the life expectancy.

---

10. ASHISH BOSE - "A Demographic Profile" in JAIN, Devaki (Ed) Indian Women, (Government of India, 1975) p. 128
11. Census of India, 1951 - Vol. I part I - B. p. 289
12. ICSSR: Status of Women in India. (Delhi, 1975) p. 122

IV

Women as Participants in Economic Activity.

Tradition bound India still believes in "non participation of women in any work, particularly manual work outdoors[13] as a traditional value. But this attitude is slowly breaking up. The participation rate of women has been steadily increasing. The largest number of working women are in rural areas engaged in farming operations. According to the 1971 census, 28% of the total number of working women are cultivators, and 46% are agricultural labourers; together they form 74% of the total working population of women. Spread of education is a major factor for this, particularly among the middle class women. As per the 1971 census there were 183.61 million workers in India consisting of 148.79 million men and 34.82 million women. Of the women workers 90% were in rural areas and 10% in urban areas. This presents a contrast to the work pattern in advanced countries where the participation rate has not exceeded 9%. All India participation rate works out to 20% which is lower than the participation rate of 28% in 1961.[14] The 1971 census classified 15.074 million persons or 36.7% of the total population of Tamil Nadu provisionally as workers. Out of this there are 11.625 million men and 3.448 million women and the participation rates for male and female workers respectively are 56% and 17%.[15] Thus there has been an 18% decline since 1961. But this decline does not reflect the true picture. The 1971 census h adopted an entirely different definiti for worker quite distinct from the earli censuses. That all members of the rur families expect infants participate agricultural operations is an obvio fact. But the census of 1971 considere as workers only those gainfully employ Many types of farming operations villages are done entirely by wom This includes cattle grazing as we There are the inevitable family chore Many dairy and poultry farms speciall medium and small size are looked afte by women. While sharing the work equally with men, village women are denied the privileges of men, workers and earning members of the family.[16] And the census for its own share has denied them the adage of workers. The 1961 census defines a worker in the cases of seasonal work like cultivation, livestock, dairying, household industry etc., as a person who has had some regular work for more than an hour a day throughout the greater part of the working season. In other trades, professions, service, business or commerce, a worker is the person who is employed during the 15 days prior to the day of enquiry. This definition is further restricted in the 1971 census. The revised concept of a worker is that he is a person whose main activity is participation in any economically productive work by his physical or mental activity. If a person has participated in any regular work on any one of the days during the reference period of one week he is categorized as

13. GADGIL, D.R.: "Women in Working Force in India" in Devaki Jain (Ed) INDIAN WOMEN (New Delhi, 1975).
14. RAMA JOSHI. "Changing Role of Women" in Kamala Bhasin (Ed). The Position of Women in India.
15. SHANMUGASUNDARAM, V. et al: Task Force Report on Human Resources. (Madras, 1973) p. 35.
16. MANKEKAR, K.: Women in India (Delhi, 1975).

worker in that activity. If a person is gaged in any seasonal work in the st one year even if he is not economically active in the week prior to numeration he is considered as a worker: his difference in the concept of a worker as certainly resulted in bringing about decline in the work force in 1971.

The conclusion drawn from the 1971 ensus data that the sex-wise capacity the State of Tamil Nadu as elsewhere has gone down in the last one decade has to be considered with some qualifications. Statistically the decline in female participation is much more marked than that of male work rate. This has to be re-examined in the light of a more appropriate definition of worker and particularly adopting a differential definition of 'women' worker. To classify a part of the "economically active population"[17] as the workforce is too vague to be of practical use. No doubt we monetize the services of those who under take own cultivation in agriculture and impute value to subsistence activities in cottage and small industries. Statistically it is possible to similarly impute money value to the domestic service of women as private teachers to their children and as housekeepers. In no way is the house-wife's work economically less active. But she is necessarily excluded from the workforce. Owing to the definitional strategy of the 1971 census only six districts in Tamil Nadu have recorded an increase in the working population during 1961-71 while the remaining eight districts have registered a decline in the workforce. There is a view[18] that the impact of changing definition on declining work rate of women is only marginal and the declining trend has been continuous. Between 1911 and 1971, percentage of women to total labour force has declined from 34% to 17% and the percentage of women workers to total female population declined from 33% to 12%. The decline has only been precipitate in recent years.

The occupational structure in Tamil Nadu is predominantly agricultural and the women participation rate is evidently higher in agriculture despite the restrictive definition of a woman worker. 80% of the women workforce is on land and the remaining 20% is distributed as in Table 3.

---

17. SPIEGELMAN, M. Introduction to Demography (Harvard, 1965) p.340
18. ICSSR : Status of women in India, (Delhi, 1975) p.62

TABLE 3 :

PARTICIPATION RATE OF WOMEN WORKERS IN VARIOUS OCCUPATIONS IN TAMIL NADU 1971.

(in lakhs)

		Total	Males	Females
	Total workers	147.41	116.67	30.74
Primary Sector	Cultivators	46.07	40.36	5.71
	Agricultural labourers	44.90	28.18	16.72
	Forestry Fishing Plantation, hunting etc.	4.03	2.97	1.06
	Mining and Quarrying.	0.50	0.42	0.08
Secondary Sector	Manufacturing, Processing, servicing, house-hold industry	6.69	4.86	1.83
	Other than house-hold industry	13.02	11.66	1.36
	Construction	2.34	2.05	0.29
Tertiary Sector	Trade and Commerce	11.54	10.68	0.86
	Transport, Storage, Communications	4.65	4.45	0.20
	Other services	13.63	11.11	2.52

Source: Shunmugasundaram, V. et al: Task Force Report on Human Resources, (Madras 1973) Vol II p. 175 (Mss).

In Tamil Nadu next to the primary sector the tertiary sector provides more employment.

Organized labour market for *women is* almost nil. Hardly 15% of the women *employees are in the organized sector* of Tamil Nadu as on 30th June 1975 and the rest of the women work force is in the unorganized agricultural sector.[19] The occupational groups in the organized sector in the order of an all India ranking are—teachers (primary and middle school teachers, the largest in the group), punch card machine operators, nurses, nursing attendants, midwives, and health visitors typists and librarians. The group of teachers far outweighs all other occupational groups taken together. Two significant factors that are noticed in the labour market for women are: (a) the emergence of women white collar unemployed, and (b) the lopsided *occupational distribution of women* workers in favour of traditional *occupations.*[20]

The projection of *labour* force *in* Tamil Nadu is based on the assumption of *male–female participation* ratio as 2:1. For the projected population of labour force of 18.51 million in 1976-77 the male workers are 12.37 million and female workers 6.13. The *same particip-ation* rate is assumed in the projection[21] of 1983–84 as well with a total popula-tion of 21.21 million male and female workers in the ratio 2:1. This appears *rather shortsighted* since there is bound to be a definite change in the women participation rate with the spread of education and changing social and economic outlook with equality of opportunity for all starting from education to employment. One expects a better picture in the Perspective Plan than the one offered to us. All over the world the proportion of women in the working population has been on an increase as an outgrowth of socio-econmic changes.[22] The declining birth rates, spread of education, expansion of opportunities to work and economic necessity lead to increasing employment of women and therefore the projections should have been made on a progressive ratio and not on a proportionate ratio.

While generalizing from the evidence from the outside world we have to consider specific problems peculiar to our country. A few of them could be highlighted in order to look for remedial action. The drop–out problem is characteristic of the Indian educational system. Similarly there is the problem of withdrawal of women from employ-ment. Withdrawal rate refers to the situation where trained and qualified women withdraw from their professions due to domestic and other reasons. *One estimate* of the withdrawal rate in respect of women teachers is as *high* as 40% *for the whole* of India. Generally under–utilization of human resources and *particularly a high* with-

---

19. Government of Tamil Nadu : An Economic Appraisal, 1976 pp 48,49
20. RAMA, T. JOSHI : "Changing Role of Women" in The Position of Women in India. (Bombay, 1971) p. 53
21. SHANMUGASUNDARAM, V Et al : Task Force Report on Human Resources (Madras, 1973, Vol. I p. 50
22. SPIEGELMAN, M : Introduction to Demography. (Harvard, 1968) p. 358

drawal rate in a developing economy like ours should be checked and corrected.

Working women in India are to be found predominantly among the lowest of occupations. This is a phenomenon common throughout the world. In western countries, the participation rate for women is relatively high in certain occupations, mainly because a few "non-significant occupations" are kept exclusively for them like that of waitresses, secretaries, receptionists etc. When it comes to more challenging jobs the participation rate of women in our country and more so in our state is no less important than in other countries. Quantitatively however, Indian women are far behind their counterparts in other developed countries where women constitute 33% of the workforce compared to approximately a third of this in India.

Sex division of labour is not the same everywhere. For women outside India it would be unsuitable to be an assistant to a male bricklayer and most men in European countries detest the occupation of a typist or stenographer. In India those jobs are common for both men and women. This disproves the idea that specialization of the labour market in male and female tasks is related to the natural differences between the sexes. If the assumption that specialization is rooted in physiological and psychological differences between the sexes were true we may not see the same tasks performed by males or females all over the world. The key to understanding the work preference patterns lies in the field of culture rather than in "human physiology or anatomy".

There is practically no resistance to the sharp artificial distinction that is created between male and female kinds of work by the vested interests. In economic theory we use a felicitous clause—"other things being constant". Similary we assume in the study of the market the homogeneity of goods under sale and the natural drift of the factors of production in search of higher remuneration. Let us see how in a market under perfect competition the value is determined so that we could study the economic returns to male and female labour. For reasons which are social, religious and cultural, women do not seek employment in far off places. Similarly they do not participate in many occupations and prefer a few professions like teaching, nursing and secretarial activities.

The question of equal pay for men and women is easily answered. In highly specialized occupations like medicine, engineering, law and teaching, there is not only equal pay but sometimes higher pay and better preference for women. However, even in these avenues due to the immobility of women labour the wages are sometimes depressed. In the study of the pricing of the services of women power, the theory of imperfect competition and the concept of non-homogeneity of women as a factor in the cost of production are relevant. Imperfections are attributed largely to social organization and the institutionalized division of labour between men and women. The supply and demand conditions of agricultural labour are not entirely governed by economic factors. Causes behind the differential wages for male and female agricultural labourers in various regions can be explained in terms of the assumption

that demand for male labour is less elastic than demand for female labour in view of the relative bargaining strength of male labourers over female labourers.

There is no unique relationship between wages and the supply of labour. It is possible for different demand conditions to give rise to differential wages, for the same supply of labour, both when supply is fixed and therefore socially inelastic and when supply is elastic.

Employers are interested in maintaining a sharp line of demarcation between male and female tasks to get the advantage of cheap labour. When consitutional safeguards are non existent women are paid less than men for equal work. But even with such safeguards "a situation of *de facto* unequal pay" is maintained by classifying the particular tasks as female and such tasks come under a lower wage category than equivalent male tasks requiring a similar degree of skill and qualification. Thus the interest of employers and sometimes the prejudice of the employees reinforce each other and the sharp line of demarcation continues.

The sex division of labour which is quite apparent in Indian agriculture hinders progress and development to a certain extent. Men refuse to weed the crops and women insist on cultivating only the usual food crops considered to be the proper work for women. Such refusal to change the traditional sex roles in labour market occurs not only in India, but in other parts of the world as well. In Africa men do not cultivate food crops which is the traditional female task and in Latin America commercial poultry is avoided by men as work fit enough for women only.

The construction industry is another industry where sex division of labour is exploited to the utmost. The male-female ratio is 29 : 470. But the women are paid lower than men for handling almost the same job on the grounds that they are slower than men. In an industry prone to frequent accidents, there is no insurance against accidents. The meanest of jobs—sanitary services—are the lowest paid. Men sweepers can rise to supervisory positions,[23] but women sweepers remain as they are. Wages discriminating against women are taken for granted.

In the unorganised sector the difference between male and female wages ranges from 10 to 60% inspite of the fact that certain exclusively women's work like transplanting, cutting, harvesting etc. requires considerable skill which men are incapable of. Even the wages determined by the government are discriminatory against women. The principles for the fixation of wages are not clear. It is certainly not need-based and efficiency-based. Women labourers in plantations are relatively better paid than in other allied occupations. In Tea, Coffee, and Rubber Plantations there are 49%, 44% and 35% women labourers out of the total workers. Working conditions and wages are better than in other agricultural occupations owing to the amenities and conditions laid down by legal provisions. Female plantation workers get free medi-

23. MANKEKAR, Kamala : *Women in India* (Delhi, 1975) p. 33.

cal services, residential accommodation and free schooling for children under the Plantation Acts. There are active trade unions in plantations.

Progress and development in agricultural technology have an adverse impact on rural women labour force. There is gradual displacement of rural women labourers because all the new methods are taught only to men. The Extension workers are normally men who are naturally inclined to pass on the new knowledge to the village men. Advances in agriculture on the one hand and the spread of education unfavourable to women on the other hand have together harmed the traditional importance give to women in rural society. Consequently the role of women tends to change from that of primary food producers to one of mere domestic helpers.[24] Women, particularly rural women have to be deeply involved in the process of modernization lest their status declines further. To summarize; the women labourers in the unorganized sector face grave problems in terms of the declining employment opportunities, discriminatory wages, disabilities, and exploitation. This is equally true of certain non-agricultural occupations like the construction industry, Bidi industry and in self-employment.[25]

The occupational categories of the Census of India are changing from enumeration to enumeration and are not therefore useful for proper assessment either of the nature and extent of women's participation in the economy or of their problems and disabilities. Hence we adopt the broad two fold classification of organised and unorganized sectors. The former is characterized by modern relations of production under statutory authority and thereby protecting the security and working conditions of labour and facilitating collective bargaining. The latter is characterized by the absence of all these protective measures and machinery. It is held that 94% of the working women are found in the unorganized sector leaving the rest 6% in the organized sector. It becomes, therefore, necessary to reduce the female population in the unorganized sector and to gradually eliminate the distinction between the organised and unorganised sectors. Particularly women play a very important role in rural development. The role performances of rural women show that the work they do in the farm and in the home contributes as much as half if not more to the economic development of the country. The International Labour Organization points to the worthy contribution of Indian rural women. Unfortunately there is no comprehensive women's welfare programme in India. A balanced labour welfare programme particularly for women labourers has to be worked out in the future development plans. It is necessary to "sift the entire spectrum of women"[26] in order to bring to light that women are just as capable of acting as agents of nation-building as their male counterparts.

' With more than 20 million women out of 41 million people (i.e. nearly 49%) of the total population we have pheno-

24. ICSSR: *Status of Women in India*, (New Delhi, 1975). pp. 63-71.
25. ICSSR: *Status of Women in India*, (New Delhi, 1975). pp. 63-71
26. DEVAKI Jain (Ed): *Indian Women*, (Delhi, 1975), p. 63.

menal "women power" [27] in Tamil Nadu. It is essential to plan their development and utilization in order to take them effectively into the mainstream of our national life. Appropriate women power utilization programmes are to be framed. Rural women must be trained in rural work by taking the city *style institutions* to them. Past experience is that little can be expected of urban educated women as agents of change in rural areas. Institutions for professional and vocational training are equally remote from them and exhibit no element of change agents. Extension workers are urban oriented with the least preference for village life and cannot communicate without inhibitions. The rural women must be guided to improve their own environment from within. [28] The overall objective is to make the female participation rate more or less the same as that of male workers.

Allocation of funds for women's education is not commensurate though they are almost 50% of the total population.[29] *But even this scanty education* given to women is not put to proper use. With no vocational bias, educated women remain unemployed. In a social *set up* like *ours*, it is necessary to evolve suitable systems of work to exploit the human resources to the maximum extent. There are professions in which part-time workers can be used without much inconvenience. (e.g. *teaching in nursery schools*, craft schools, social service, journalism etc.) In Tamil Nadu there is a shortage of trained doctors and yet more than 1,000 women doctors are unemployed in 1971. The main recommendation of the Commission on Women's Education is that steps be taken to improve part time work available to women. Not merely Surveys of employment opportunities for part-time work and establishment of placement services are imperative, there is also need for differential rules for recruitment and retirement for women.

Economic necessity pulls out women from their homes. But in the Indian context woman comes out to work without the accompaniment of necessary adaptive changes in her domestic role. Consequently she is made to perform professional as well the familiar domestic roles without the necessary complementary changes in her "role relations" [30]. The working women with families have *thus become the victims of conflicting* role expectations from both professional and domestic sides. It is necessary to build up coping facilities to increase the effectiveness of family role performance and to improve role performance in professions. A study reveals that particularly

---

27. Mc MAHAN, T.S. : *Women and Economic Evolution or the Effects of Industrial Changes upon the Status of Women"*. (Submitted in 1900 and published in 1912 by the Wisconsio University, USA)

28. ADISESHIAH, M.S : *Towards A Learning Society*, State Planning Commission, Tamil Nadu (Madras, 1973)

29. RAMA J. Joshi : "Changing Role of Women" in *The Position of Women in India*, (Ed) KAMALA BHASIN. (Bombay, 1971), p. 52.

30. RAMA J. Joshi : "Changing Role of Women" in *The Position of Women in India*, (Ed) KAMALA BHASIN. (Bombay, 1971), p. 52.

during infancy of their children, since housewives could not combine work and home, they prefer taking up careers again when their children grow up sufficiently. This is an instance of coping mechanism. Yet another is the part-time employment. To be a successful wife is a career in itself and if a women chooses another career it means she makes "reconciliation between two roles."[31] Unlike her male counterpart she accepts double responsibility as a worker and mother and therefore, apart from providing for adequate coping facilities attitudinal changes towards working women are also called for. Enlarged opportunities for women might be opposed on the grounds of conservatism and the fear of chronic unemployment with women becoming effective competitors. In view of social justice and human rights, all forms of exploitation of women leading to their subjugation and dependence must be removed. The UN Declaration on the Elimination of Discrimination emphasizes the full participation by all sections of women and opportunities for full development of their potentialities. Women have to meet major challenges to avert social crisis.

To hope to achieve full economic equality between men and women in the Indian context is futile. For in the long run two persistent factors are bound to operate against such equality. They are (1) the continuation of the negative cultural environment evolved historically and perpetuated socially and (2) the continuing demand for housewives on the part of men and the continued inclination on the part of women to fulfil this demand. The job of a housewife provides excess leisure and allows women to escape the level of economic activity that society demands of men. In the case of Indian women unlike in other parts of the world, social mobility and freedom are in opposite directions. "Certain kinds of social mobility lead to a restriction rather than an enlargement of the freedom of women." [32] They have to operate within the existing framework of caste structure. Because of this ambiguity, it is difficult to assess the impact of social mobility and change on the status of women. T.S. McMahan's thesis [33] on women in 1900 is remarkable for its deep insights. It is held that the middle class would feel most the discordance between the new economic forces and the old ideals. While custom could not hold back the powerful economic drive by which women of low economic status work outside the home, those with high economic status would totally consume leisure and live tradition bound lives. Only the women in the middle class realistically have a choice between working outside the home and being-full-time housewives also. This is true of Indian women.

---

31. CHATTOPADHYAH Kamala Devi : "The Women's Movements—Then and Now", in DEVAKI JAIN : *Indian Women*, (New Delhi, 1975) p. 30

32. DEVAKI Jain (Ed) : *Indian Women*, (Delhi, 1975), p. 63.

33. McMAHAN, T.S. : *Women and Economic Evolution or the Effects of Industrial Change upon the Status of Women"*. (Submitted in 1900 and published in 1912 by the Wisconsin University, USA)

Be it in the social interest to equalize educational opportunities to women or in self-interest of those male chauvinists like Rousseau who would educate women like men because "the more they resemble" the male sex the less power they have over them—that education is a basic need for women is now uncontested. The recent years have seen greater strides in education.[34] There is an increasing awareness, particularly in urban areas, among parents to also educate daughters to make them self - supporting and the girls are more keen than ever to be educated to have status, security and independence. At all levels of education, the enrolment has been on the increase. But compared to the enrolment of boys, girls' enrolment is not quite encouraging. The all - India literacy level for women rose from 8% in 1951 to 18.5% in 1971 and this is still below that of men.[35] The main hurdle to women's literacy is the lack of proper educational opportunities particularly for higher education. In Tamil Nadu, there is a 25% increase in literacy between 1961–71. Still six out of every 10 people are illiterate even though Tamil Nadu is the second most literate State in India. (In Kerala the literacy rate is 60%.) Next to the women of Kerala where 50% of them are literate, Tamil Nadu has the largest percentage of literate women. But it is only one half of Kerala's female literacy level. An encouraging evidence from the 1971 census is that the growth of literate females in Tamil Nadu is 79% which is considerably higher than that of literate males, viz., 43% in the decade between 1961–1971. This is true of all districts with the highest growth rate of female literacy in the Chingleput district. (84%).[36] The progress in women's education in India, with 50 million literate women and 28 million girls in schools, however, should not blind us to the fact that Indian women are 32 years behind the literary level of Indian men.[37] The present female literacy rate was reached by the males in the 1940s. The entire population of many countries is less than the 78 million literate women of India and considering the state of economic development, this presents an optimistic picture for the future. Women in India are gifted with equal capacities and are only waiting for opportunities.

Women's status stems from education more than from ancestry or wealth. It also begins at home. There are still "the unskilled, the uneducated (and) the disadvantaged" women in India in very large numbers. And the task of liberating those truly unliberated rests with the educated Indian women with broadened intellectual horizons contributing to mature and stable personalities. They have to seek new solutions to problems and feel a sense of personal obilgation to contribute something to society.

---

34. ADISESHIAH, M.S : *Towards A Learning Society*, State Planning Commission, Tamil Nadu (Madras, 1973)

35. RAMA J. Joshi : "Changing Role of Women" in *The Position of Women in India*, (Ed) KAMALA BHASIN. (Bombay, 1971), p. 52.

36, 37. RAMA J. Joshi : "Changing Role of Women" in *The Position of Women* in India, (Ed) KAMALA BHASIN. (Bombay, 1971), p. 52.

V

Women's Movement

The 'virulent feminist movements' of the Western countries with a streak of excessive dramatization is conspicuously absent in India. Here Women's movement, particularly during the nationalist struggle has been a broadbased social force with a large vision, and not a narrow circumscribed stream. There is no demand for deep changes leading to great social upsurge. Rather it seeks to provide a "healthy core and a rational demeanour".[38] There are no two warring factions—women versus men-but at best two segments, the liberal versus the conservative.

Women as family members or citizens are not to be viewed in isolation from the entire society. The needs and demands such as adequate facilities in housing, education, water, electricity, transport and the like apply to all. So is the need for clean air, food, administration and a hundred other factors. But in the provision of all these women are a shade worse than men. Added to these generalities there are certain aspects of Indian life whose hardness and tortuousness get intensified in the lives of women. But in none of the above aspects women's voice is heard both due to the ignorance of the masses and the callous indifference of the classes.

The deadly complacency among women is evident from the fact that we have not promoted even a powerful consumer movement, a territory very close to them. The crucial issue of price rise is used essentially as a political baton by opposition parties. Organized consumer resistance is unheard of in South India. Women have a significant role to play in this sphere. Comparatively consumer participation is better in Delhi and Bombay than in cities down South. In our country no one takes the responsibility of rejecting sub-standard goods and with such an intricate network of malpractices as is found here consumers particulary women have a great duty to perform. Very few recognize the efficacy of voluntary boycott of commodities crossing a reasonable price level or action against hoarders and blackmarketeers as our social duties.

A classic instance of women's complacency is the problem of dowry which affects them seriously. "It is socially a most degrading institution and economically hazardous, making a mockery of law and human decency". And there is no sincere effort to stifle it leave alone 'exterminate' it. This is an open and consistent violation of a law by all classes and at all levels. Child marriages still continue (22% of girls in the age group 10-14 married off in rural areas) nullifying the Act with impunity. Yet the women remain silent. There is no concerted programme for the most vulnerable part of our population on which rests the future of the nation—the children—comprising 40% of population. A major part remains undernourished. In our constitution the ideas of reform in respect of women are far ahead of the actual practice. The clause in the Constitution assuring equal pay for men and women is not honoured except perhaps in the very limited area of

38. CHATTOPADHYAH Kamala Devi : "The Women's Movements—Then and Now", in DEVAKI JAIN : *Indian Women*, (New Delhi, 1975) p. 30.

government and quasi - government services. The society is not well adjusted to modernize and institutionalise the care of children, old people and other non - earning dependents. This is a sociological fact which an economist should not ignore. It is wrong to pass government regulations which are not enforced.[39]

VI

Women's Welfare

On paper the plan priorities are education, health and welfare of women with the overall emphasis on the development of human resources. But the proportional allocation of funds for these programmes has been steadily on the decline in the successive plans. Expenditure on human resource development has been reduced to 11.17% of the total outlay in the Fifth Plan from 24.10% in the First Plan.[40] There is therefore need for drastic revision to at least the original 25% of the outlay in the Sixth Plan.

Programme for Women's health has been exclusively confined to Family Planning. The Perspective Plan of Tamil Nadu seeks to enhance the outlay on Health, Family Planning, Water Supply, Sanitation and Nutrition from Rs.208 crores in the V Plan to Rs.485 crores in the VI Plan. The proposed outlay on Health and Family Planning is Rs.120 crores (Rs.50 crores - V Plan). Outlay on Nutrition similarly is to be increased to Rs.145 crores—an increase of nearly 2⅓ times that from the V Plan outlay. Particularly attention may be drawn to the outlay on Expectant and Nursing mothers. The V and VI plan outlays for this head are Rs.9.10 crores and Rs.2.86 crores respectively.[41] Between the two Plans almost all outlays under Health have been stepped up barring the above mentioned. One is not able to comprehend this slashing down of the already inadequate provision to a third of it. When Family Planning takes up 25% of the outlay on health in Tamil Nadu an insignificant allotment for the care of expectant and nursing mothers only speaks of the gross indifference of planners towards womenhood.

Nutritional standards fall short by about 30% in all cases and more so in the case of women and children. This is reflected in the poor state of maternal and child nutrition and the related problems of the growth of vulnerable population, nutrition related morbidity, infant and child mortality and to the larger issue of sex imbalance in our country. Except to state that "the educational and feeding programmes for expectant and nursing mothers and malnourished children will also be organized", the Perspective Plan does not enlighten us on the future course of action.

A crucial indicator of the welfare state is the progressive measures undertaken for the welfare of women and children. Despite the fact that Tamil Nadu was the

39. Government G.O. regarding equal wages
SHANMUGASUNDARAM, V. et al : *Peasant Organisation in Thanjavur* (Madras, 1976) See also G.O. Ms. No. 164 (L&E) dated 2-3-1976 and G.O. Ms. No. 173 (L&D) dated 3-3-1976.

40 41. STATE PLANNING COMMISSION : *The Perspective Plan for Tamil Nadu*, 1974-84. (March, 1974) Vol. II pp. 255 and 260.

first State in the entire country to start off with Women's welfare activities, the achievement is not adequate. There is a well organized Women's Welfare Department working across the cross section of population through the hierarchy of administrative machinery from Gram Sevikas at the Village level, Mukhya Sevikas at Panchayat Union Level and District Women's Welfare officers and the Director of Women's Welfare at the State level. The Women's Welfare Department integrates official and non-official agencies. The Mahalir Manrams from the nucleus of women's welfare activities like social education, adult literacy, cottage industries and pre-basic classes for children. They also function as craft training centres and production centres. Each Manram covers a population of roughly 1,000 women and is expected to bring about social change particularly with regard to the need for limiting the family, the habit of saving, to shed the age-old superstitions and caste feelings. There are more than 13,124 such Mahalir Manrams with a membership of 3 lakh rural women. The Tamil Nadu Women's Welfare programme also comprises (i) Kuzhandaigal Kappagam with daily feeding of preschool children and expectant and nursing mothers. This programme is in collaboration with CARE free feeding programme. This is not however uniformly distributed over the districts. Particulary there are areas with a concentration of landless labourers and women where this facility is entirely absent. A better co-ordinated programme is essential. In the urban areas Women's Welfare programme comprises Service Homes, Secretarial courses and hostels for Working Women which only marginally benefit them and the Perspective Plan calls for a 'composite Women's Programme'[42] which includes (1) the balanced distribution of Mahalir Manrams and Pre-School Feeding Centres among the Unions based on Population, (2) increasing the Creches to 1,000 from 200 in the Vth Plan, (3) Programme of Nutrition Education through Mahalir Manrams and (4) Training Balasevikas and Associate Women Workers and Craft Instructors.

At the all India level there are several departments and agencies—Union Planning Commission, Ministry of Education and Social Welfare and specialized agencies like the Central Social Welfare Board, National Council of Women's Education, Ministry of Health & Family Planning, Ministry of Home Affairs and Ministry of Labour and Employment—involved in promoting Women's Welfare. However, neither at the State Government level nor at the Union Government level there is any uniform pattern and the unco-ordinated programmes are administered by a large number of departments. As the ICSSR Report on Women suggests, a comprehensive Women's Welfare programme should include (a) programmes under statutory obligations (such as the suppression of Immoral Traffic Act 1955 or the Maternity Benefit Act, 1961), (b) development programme providing essential services and opportunities such as education, health, maternity and child welfare, family planning, nutrition and training, and (c) programmes for special groups of women such as assistance to

---

42. SHANMUGASUNDARAM, V. *et al.* : *Task Force Report on Rural Development and Rural Housing,* (Madras 1973) Vol.I.

widows, aged and destitute women, hostels for working women in urban areas etc., Tamil Nadu has had an early start in respect of all the above programmes and awaits more expansion physically and enhancement of outlay financially.

VII

Need for action on certain lines may be highlighted. (1) the Maternity Benefit Act of 1961 is of limited coverage applicable to only the organized part of the sector of the labour market. This has to be extended to all industries by means of creating a State Maternity Fund on the lines of the ESI scheme. A realistic welfare programme cannot ignore the rural women. The provisions of the Maternity Benefit Act could be extended to cover women agricultural labourers by a levy on farms with suitable reduction for smaller holdings. This has been recommended by the Committee on Taxation of Agricultural Wealth and Income. (2) Creche facilities have to be extended in rural and urban areas to provide the important coping facility for working women. (3) Wherever possible flexible working time may be planned for women workers. (4) Women's labour market may also be reorganised in terms of an integrated development of training and employment, working for the expansion of part-time employment opportunities, re-entry of women in employment after withdrawal for family reasons, avoidance of unnecessary transfers, enforcing laws protecting women workers and organizing labour unions in the unorganized sector (5) In all developing countries including ours, concern for planned development has resulted in more and more men receiving vocational training in the school and on the job. Very few women get any vocational training except for a small number entering the universities. A 'vicious circle' [43] is developed. It is held that ordinary girls need no special training since they are eligible only for jobs which require little qualification. Women, therefore, escape from the labour market and are confined to domestic work with the result that the traditional pattern of one earner with poor families is perpetuated. The vicious circle has to be broken by swelling the labour market with more vocationally trained and working women. This will improve women's competitive position in the market.

---

43. BOSERUP. E : "Women in Indian Labour Market" in DEVAKI Jain (ed.) *Indian Women*, (New Delhi, 1975), p. 110

* * * * * * * *

Summary of Discussion

In the discussion of the paper at the Seminar held in the Seminar room of the Institute on 24th November, 1977, under the Chirmanship of Mr. R. Nityananda, Management Counsultant, Madras, the author stated that the paper is primarly on the economic role of women. The bulk of the literature on women-their place and role in society—has been mainly the concern of women authors. As this is a rich field for meaningful study, men also should enter the area. The methodology adopted by statisticians, law makers and politicians has treated women as a homogeneous group and conclusions so arrived at have been necessarily inaccurate. Social change as far as the majority of women are concerned has been peripheral in impact leaving the core values undisturbed. In considering the demographic status of women in the country and the state, the picture is a steadily declining sex-ratio of fewer women than men, causing adverse effects on socio-economic structure. Various explanations have been advanced for this trend, ranging from under-enumeration to neglect resulting in higher female mortality. Remedial measures should include improvement of health-delivery services in rural areas, with greater emphasis on preventive medicine rather than curative therapy. Referring to the participation of women in economic activies, the author observed that this is the core of the paper. Women worker participation rate in developed countries is higher in urban areas while in India it is higher in rural areas. The occupational structure is predominantly in agriculture and allied occupations—80 per cent on land and the remaining 20 per cent in other occupations. Only 6 per cent of the women employed are in the organised sector—the occupational ranking in India being teachers, punch card machine operators, nurses etc. The projected male-female ratio of 2:1 in the projected labour force in Tamil Nadu needs revision in view of the larger number of women entering the employment market. The drop-out problem characteristic of the Indian formal education sub-system finds its counter-point in the withdrawal of trained, experienced women from employment for domestic or other reasons, leading to a waste of developed human resources. Working women in India are to be found predominantly in the lowest of occupations. Another feature of the employment profile is the wage discrimination and exploitation, particularly in agriculture. However, an exception seems to be the plantation industry where women are better paid. The employers also appear to have a vested interest in maintaining the distinction between male and female tasks. This traditionally accepted sex-wise division of labour hinders development to a certain extent and inhibits productivity. In agriculture, weeding and transplanting are female preserves but ill paid. Similarly, in the construction industry there is wage discrimination. The author expressed the view that the existing socio-economic disadvantages under which women function in India should be erased and that could be achieved through a comprehensive women's development programme utilising women power to a great extent. However it would appear that the agents of change have not yet been identified. The plan priorities are employment, education and welfare.

The author's suggestions in this regard include greater allocation of funds for women's education, equal pay for equal work, health care, part-time employment and policies directed towards enlarged opportunities for women. These adaptive changes will contribute to optimal use of women power for development. Some problems such as dowry, child marriage etc. which still persist require a more forceful approach by women. Women's movements should concern themselves actively in such social problems.

During the discussion, it was observed that the views expressed in the paper were bold and forthright. There were, however, some traditional attitudes which prevented women from taking part in all aspects of national life. We are using these traditional attitudes as an excuse for evading Social change. It is the women's image of themselves that is the principal barrier to women's progress in this country. The Chinese example is an instance of a tradition bound society transforming itself. Analysing the economic implications, the first aspect that is evident is that the international profile of women's work participation reveals high levels under two opposite situations. Firstly women may enter the employment market in large numbers under conditions of economic want. Secondly, at the other end of the spectrum, when women are free of want and drudgery they may seek work outside their homes. Another aspect is that cultural factors do influence the pattern of economic activity of women. For example, weeding in paddy cultivation in India and stenography in western countries are held to be women's occupations. While the sex ratio in Tamil Nadu has been declining over the last few decades, in neighbouring Kerala it is higher. This could be the result of improvement in hygiene and the wider spread of education. This angle deserves research. An opinion was expressed that if wages are increased for women workers it may lead to less productivity. Referring to low wages for women, absence of collective bargaining was mentioned as one of the causes. In this connection it was pointed out that in sectors like the plantation industry, women workers were preferred wherever deftness was required. Economic activity is only a portion of the multi-faceted role of women. As regards possible competition from women in the employment market, in an unemployment ridden economy, the relative lack of mobility is a deterring factor for them. A query was raised as to why housework should be considered of less importance than other forms of economic activity. Women's lib movements involved only a small percentage of the population. Regarding the unemployment figures in general, it was found that Employment Exchange statistics were not realistic and, therefore, there was need for a more reliable computation. In the professional institutions there could be some reservation of seats for women.

It was generally agreed that studies in depth on women's role and welfare were essential. The ICSSR programme of women's studies is a welcome step in this regard. A wider outlook, without undue emphasis on sex, should be accepted as the ultimate objective. The immediate requirements seem to be eradication of social evils like dowry and child marriage.

SOME TASKS FACING SECONDARY EDUCATION*

Backdrop

We are meeting on the morrow as it were of the decision made by the meeting of State Ministers of Education presided over by the Union Minister reiterating their earlier decision to continue with the New Pattern of Education. In fact it was noted that most States were operating the New Pattern, and the few remaining ones have positioned themselves to do so, so that the 10+2+3 system, as the New Pattern is called, will be fully operational by the end of the Sixth Plan. My approach to the New Pattern is and has been that this is one way of cutting the educational cake and this way is not *per se* superior to any other way of slicing the educational cake–as we as a country have done in the past, and as many other countries are demonstrating today. The changeover to the New Pattern is good and justified *only* if we use the occasion (a) to attain as many of the national, state and individual educational objectives as we can and (b) to correct the real ills of the existing educational system. And it is to inventorying these—attaining some goals and curing some glaring maladies in our secondary education system—that I now turn my attention.

Goals and Problems

Anti-innovation First this change over to 10+2+3 could be a means of shaking us, educationists, and our educational system out of the anti–innovation, anti–change, tradition–oriented cocoon which is our ethos. The substance of what is taught and what is leart is anti-change in the sense that some 99 per cent of it is received knowledge, which it is the function of educational infrastructure–the school building, the teacher, the library, the laboratoy to preserve, transmit and diffuse. By the time the teacher has done this preservation and transmission job and the student has received all that, there is little place for anything new. The methods we follow in this task of transmitting received knowledge are anti–innovational in the sense that we are still following the method of oral instruction invented by our *guru–shishya*

*Extract from the key note address delivered by Dr. Malcolm S. Adiseshiah to the Conference of Boards of Secondary Education at Madras on 23rd September, 1977.

forebears before the printing press was invented and before today's book revolution could even be dreamt of. There may have been a case, before printing was discovered, for the teacher to be a walking Ramayana, Mahabharata, Vedas and Agamas and library classics. Our continued reliance in the secondary school on the one-way-monologue called the lecture method, with the student as a passive recepient, busy taking down notes, does not admit of other methods of learning. And so I look to this changeover to the New Pattern to blow into the secondary school class room at least some of the winds of change which characterise our society and force us to look again and again at what is taught and learnt and how it is taught and learnt, to allow for new knowledge, up-to-date information, and methods of learning which might include dialogues and multilogues

Unfulfilled Pledge

A second objective would be to take our ministers seriously and set up a system under which the constitutional pledge of free, universal education for all upto the age of 14 is really fulfilled by the end of the Sixth Plan, that is by March 31, 1984. As the age of school entry is normally 6 plus (in this state it is unfortunately 5 plus,—I say unfortunately because one precious year of freedom and free play is lost by our children) education upto 14 years of age means 8 years of schooling for every Indian child. This in a sense loads the scales in favour of slicing the 10 year school into a 5+3+2 pattern (in this State we had decided on a 5+2+3 system, but changed over in the interest of uniformity). Hence our educational obligation is to see that all go through the primary and the middle school by 1984. I assume that the middle school is part of the secondary school, as in this state 2,800 out of the 2,900 secondary schools start at Standard VI. This is a rather formidable task: in absolute numbers it means providing the equivalent of 8 years schooling to an additional 5 crores of pupils. I have used the phrase, providing the equivalent of 8 years schooling, rather than straight 8 years of schooling. quite deliberately, because with the mass poverty in our country which will still be with us at the end of the Sixth Plan, (it is destitution which will be lifted within 10 years, that is, by the end of the Seventh Plan), it is not possible to increase the holding power of the schools, whose efforts must, therefore, be complemented by a programme of non-formal education to provide the 8 years of learning skills at a time, place and manner convenient to the dropouts, pushouts and leftouts of our primary and secondary schools. The Boards of Secondary Education will have to establish equivalences between the formal and non-formal education systems, and tie in the two by providing in the primary and secondary schools for multiple entry and exit points. If these are done, starting now, then I believe we can keep our constitutional pledge.

Inequality

A third issue that we can look in the face is the elitist nature of our secondary education system. The field studies into the secondary education system conducted by a group of scholars on behalf of NCERT in the late sixties and published by the National Council in 1971 brought out the startling fact that 80 per cent of those who successfully complete the secondary school in each of our states

come from the top 20 per cent of our society. (In this State a survey in July/August of this year of SSLC completers showed that 28 per cent come from the low income group.) The basic causes for this educational inequality are grounded in our unequal and unjust society of which the school is a mirror, and about which the school itself can do little. But the secondary school can become conscious of this sad and scandalous fact and do two things to alleviate, not solve, the problem. First a programme of the simplest form of programmed learning wherein the learning prescribed follows the individual students' learning ability and rhythm rather than the individual student being fitted into some pre-conceived learning mould, and of compensatory instruction for all first generation learners—whether in school or in out-of-school programmes—should become a normal feature of second level education, so that the equality of secondary education opportunity which our system of national and state scholarships attempts to ensure can be further buttressed and made real by a programme aimed at some equalisation of educational attainments. The second is to look at our secondary school curricular offerings which seem to be loaded in favour of the kind of knowledge and information favouring children of the urban/industrial well-to-do sector as against the knowledge and know-how needed to live gainfully and fruitfully in our agro-rural sector, so that even students from the rural sector who do well in the secondary schools seem required to assimilate themselves to its anti-rural environment.

Crowded Curriculum

This raises the larger question of the curricula of the secondary schools. We should use the changeover to the New Pattern to take a good hard look at its many facets. On one facet, our Union Minister, Dr.P.C.Chunder, has focussed our attention. Is our curriculum over-loaded, leaving little time for the many other ways in which the student's personality develops? A Committee is now at work on this issue. Basically Dr. Chunder is right in pointing to one of the traditional ailment of the educational system—which I term as the process of proceeding by addition. We are concerned about our fast expanding population: so we add population education to the curriculum. We are worried about under-nourishment and mal-nutrition and so we add food science to the curriculum. We are worried about pollution, so we add pollution science to the curriculum. And so on. It almost never occurs to us to compensate our addition by a subtraction. But the curricular offering has also to be an optimum blend of avoiding over-loading with keeping up with the rate at which knowledge and information is exploding in every subject field. Whether it be in the hard sciences like solid state physics or polymer chemistry or DNA biology, or in the soft sciences as in sociology, economics or psychology, more has been discovered since 1970, than since the beginning of that science and 1970. I am, myself, therefore, inclined toward an enriched curriculum, because that is demanded by our times and state of the art, and also because I do not know of anyone who has been intellectually and spiritually crippled by studying too much. This then takes us on to the question as to what we should do with the curriculum and the text-books accompanying it. Here my suggestion to the secondary schools is to shift to the method of using the curriculum and the text-

books from teaching to learning and self-learning. If this is to be done, then we would need to break down each subject into small self-contained learning modules, which at the concluding stages of the secondary school means adapting the semesteral or trimestral system. From this point of view, I regret that the Central Board of Secondary Education had to go back on its decision to break down the school year into some homogeneous learning units. I realise that to suggest that in the secondary schools final classes we should shift from the emphasis on teaching to learning and self-learning is easier said than done. Such a shift involves more work for the teacher who becomes himself simultaneously a learner, and certainly more initiative and exertion for the student. And it is against our whole teaching tradition, as I noted earlier. But there is no choice for us, except to shift to learning, of learning as a life-long task, for which the school has to equip us with the capacity of learning how to learn.

Work Experience Vrs Productive Work

At least in regard to work experience which is a part of our new curriculum, the learning method should predominate. Here there are two issues that should be considered. First is the controversy that has been underground but now with our new found enthusiasm for Gandhiji has surfaced, namely the controversy over whether it is work experience or productive work which should be part of the school system. Work experience which is learning which brings into play all of a student's resources—his hands, feet as well as his emotions, intelligence and will in productive work wherever it can be had as educational experience. Productive work results in goods and services turned out by the student during the school hours which are marketable and are marketed to enable the student, his family/and the school to earn resources towards their upkeep. Each has its own rationale and justification. Work experience makes for learning which is comprehensive and non-bookish. Productive work as the most recent NCERT case study of the basic schools in some districts of Andhra Pradesh has shown, makes for a decrease in the percentage of drop-outs as compared to non-basic schools, because the former offer a palliative—some earned income—to the root cause of the non-holding power of the traditional school, which is poverty, as noted earlier. In this situation, I wonder if the Boards of Secondary Education should make provision for and recognise as equally valid and equally eligible for grants-in-aid both types of school. The second problem that we face with regard to work experience is what I earlier called the process of proceeding by addition. In the Curriculum of the 10 Year School published by NCERT after a deal of study and consultation, and accepted by all of us at the 1975 National Conference, work experience is shown as a separate curricular offering and has a specific number of hours per week set apart for it. At the time when we accepted and endorsed the curriculum, I raised the question and I raise it again today, as to whether, in the long run, work experience should not be built into each subject are through adult literacy in the learning of language, through work on the environment in learning the natural and physical sciences, through work with the village cooperatives, family surveys etc. for social studies etc. Probably for an initial 4 or 5 years, work experience could be

shown separately, as a result of which it should become so woven into the learning of various subjects that there is no more specific separate provision for it, as there is no separate provision for library work, home assignments etc.

Examination dominance

There is probably no more serious responsibility that the Boards of Secondary Education carry than in planning, sustaining and operating the present examination system and all that goes with it. The final secondary school examination called by various names—Matriculation, SSLC, SSC, AISC, ISC, etc. so dominates all that the teacher, student, head-master, principal, parent does and the employer and government expect that in effect it is not an education and learning system that we are concerned with but an examination system. We can well call ourselves the Board of Secondary Examinations instead of the Board of Secondary Education. We have of course tried to introduce various improvements in the examination system—by centralising the valuation, computerising the additions and classification of marks, training teachers in question paper setting and valuing, beginning the building of model question papers which could lead on to the development of question banks, etc. At your Bhubaneswar Conference last year, you decided that marks should be replaced by grades, though none of you has acted on this suggestion. Incidentally, there are some indirect benefits to others from some of these improvements. In this State, for instance, there has been a frequently voiced criticism against the disaggregation of the University system, by pointing to the alleged liberality of PUC examination markings of Madurai University compared to that of Madras University, placing the students of this University at a disadvantage in the matter of selection to the professional colleges. An analysis of the results of the centrally conducted secondary school examination by the Directorate of Government Examinations, however, shows that there seems to be a difference in examination performance as between students in these two areas covered by the two universities. But to return to the main problem of the examination system and its hold over all of education and society in terms of the number who are failed, the very precise classification on which scholarship awards, professional college admissions and employment-all depend, when all of us know the imprecise nature of the whole marking system, compounded by what we call moderation. We should make a beginning in its gradual replacement* by a system of continuous assessment of the total development of the student's personality, an assessment and self-assessment frame which will be part of the students learning package, including acting as a signal to the teacher as to where he needs to change in his process of teaching and learning, and the student as to the areas of his strength and weakness. The conference should really urge the Boards to make this examination reform their highest priority in accordance with the recommendation that we adopted in NCERT's Ten Years School Curriculum—and your Annual Conference last year.

Higher Secondary Problem

The conference also faces a whole host of problems connected with the +2 (higher secondary) stage. There is the problem of diversity with regard to the authority responsible for the higher secondary stage in each state. In a sense there is an even more urgent need for some exchange of views, plans and

experience between the stages with regard to this stage which is now being experimented, with and which is giving rise to many more problems than with regard to the secondary education stage. I would hope that there will be agreement that this Conference of Boards of Secondary Education will also be the forum for discussion and exchange of views on matters we are all facing with regard to the higher secondary stage. I shall just list some of them. There is the problem of varying location and terminology. In some states they are located in colleges and part of the university structure. In others they are in separate institutions called junior or intermediate colleges and are under a separate authority. In still others they are a part of the secondary school and are under a Board of Higher Secondary Education. Second these differences in location also reflect differences in aims and curricula. In some states the higher secondary stage called Pre-University or Pre-degree is a one-way street to the first degree course and the curriculum reflects this. In others, where the higher secondary is a distinctive school stage, the curriculum provides for academic and vocational optionals so that students can at this stage decide whether they wish to take academic subjects and go on to the first university degree, or wish to stop off at this stage and enter the employment market and if they do so, to equip themselves with some pre-vocational skills. A question raised is whether this 15 or 16 years is not too early an age for a student to make such a serious decision without guidance from specialists, in place of the system of natural selection and survival of the richest and fittest that now operates. Now while the planning and operating of the academic options are relatively problem free, the planning and operating of the vocational options raise questions of the agro-rural vocational skills for which we as a school system are unprepared, the problem of demonstration farms, laboratories and equipment for these vocational courses, and above all that of text-books, and qualified teachers. On this last at Bhubaneswar, you made wise recommendation that the vocational teachers need not be degree or diploma holders but could be craftsmen, technicians and I would add progressive farmers or dairy men. Another set of problems relates to the serious disruption caused to the colleges and teachers in changing over from PUC to the +2 system. For colleges there are questions of financial viability as they lose the PUC grant-in-aid or fee compensation and face unused laboratories and class rooms set up for the former PUC programmes. For teachers, the problem is that many of them will have to shift over to the higher secondary stage, involving some retraining and some issues of status and prestige. This is just the beginning of the inventory of problems raised by the +2 system and we need to meet and take counsel together on them.

Lack of Systems approach

Finally there is the problem of the fragmentation of the education system which needs remedy. There is an inherent logic and a system in it which our division into primary, secondary, now higher secondary and university stage and overlaping it all into the formal and non-formal learning system seems to overlook. The NCERT publications, the curriculum of the Ten Year School, the Vocationalisation of the Higher Secondary, the Training of Teachers and the priorities in Education

Research (this is still in press, I believe) were a good and successful attempt at looking at the school stage as a System and restoring to it its unity as a learning process. What is lacking now is a similar unifying effort as between the formal and non-formal learning system, in part because the non-formal learning opportunities at the school level are either nonexistent or are at a beginning stage. Following the NCERT effort at synthesis, I believe there is need for such an effort at unity and synthesis to be undertaken in each state. But it is in relation to the secondary and new higher secondary stage and the university stage that there is a gap which needs to be recognised and closed. This gap refers to several problems. At the college stage, there is the bemoaning that the students who come from the secondary stage are not competent in a number of areas-in linguistic skills, in subject comprehension, in methods of learning, in following the technology of teaching, etc, and it is too late at the college stage to remedy these shortcomings. And then there is the question which professional courses as well as the arts and science courses at the post-secondary level are facing, as to whether these courses should be reduced by one year because of the introduction of the +2 stage or whether they should be maintained at 5 years for the first degree in medicine, engineering and agriculture, and 3 years or B.A., B.Sc., B.com. with an enriched curricular content. There are also the non-formal education programmes that are sweeping through the post-secondary courses-in methods through morning or evening colleges, correspondence institutes, part-time and own time provisions, and in curricular content in the case of 3 universities in the South—Andhra, Madurai and Mysore—through their experiments with the open university system. I believe that the time has come for a regular planned and ordered consultation between Boards of Secondary and Higher Secondary Education on the one hand, and the Universities on the other at the State and National level. In this case this kind of periodic consultation can start with an annual meeting between the standing committees or officers of the Conference of Boards of Secondary Education and the Association of Indian Universities.

And so I end with where I began. I believe the new Pattern of Education offers us a challenge and an opportunity. It is a challenge to all of us educationists to face frankly the manner in which we are using or misusing our privileged position in a country where the educational privilege is not available to the poor majority. It is an opportunity to use this changeover to right the wrongs of the system. It is to these two tasks that I believe we should all of us address ourselves.

BOOK REVIEW

TRIBAL WELFARE IN SALEM DISTRICT

BY

S. RAMANATHAN

Reviewed by N. SUBBA REDDY

This study of Socio-economic conditions of the tribal people in Salem District has been conducted by the Madras Institute of Development Studies at the instance of the Social Welfare Directorate of Tamil Nadu Government. The universe of the survey is the ninetyfour thousand and odd tribal population of Salem District, two-thirds of whom inhabit the inhospitable terrain of hills and jungles.

The experience gained by Prof. Ramanathan in an earlier study of the educational problems of Scheduled Castes and Scheduled Tribes of Tamil Nadu obviously stands him in good stead as is evident from the insights he offers into the nexus of the tribal situation and administrative action.

In the long and informative introduction, the author touches on some of the general issues concerning the scheduled tribes of Tamil Nadu as a whole. The "area restriction" by which a person is included in the category of scheduled tribe when he lives in one speficied area only and not otherwise, rightly comes in for critical comment. The problem of synonymous appelations applied to one and the same community receives much deserved attention. The solution, in the view of this reviewer, does not however lie in doing away with the synonyms as the author suggests, but in enumerating all the variations of nomenclature and relating them to the generic title. Likewise there is no virtue in deleting from the scheduled list any of the tribes with negligible populations. This section raises many useful points regarding the enumeration of scheduled tribes and the preparation of official lists which the census office and the Government Departments will do well to ponder over.

It is noted that the tribal population of Tamil Nadu has risen from 2,51,991 in 1961 to 3,11,515 in 1971 Of these, 94,383 constituting 30.3% of the total tribal population in the state, live in Salem District alone. The Malayali tribe constitutes a predominant segment among the tribes.

The percentage of literacy among Scheduled Tribes in Tamil Nadu was only 5.91 in 1961. By 1971, this figure rose

to 9.2 as against 36.7 among the non-scheduled tribe population of Tamil Nadu. The figures for the school drop-outs are apalling, viz. 70.3% for tribal boys as against 32.9% for non-tribal boys at the middle school stage and 67.3% for tribal boys as against 33.2% for non-tribal boys at the high school stage.

Only 117 pupils belonging to Scheduled Tribes in Tamil Nadu could receive Government of India Post-matric scholarships during 1975-76. 1,622 pupils received Pre-matric scholarships during the same year. Curiously these were awarded only in six districts of Tamil Nadu and not in others. For some reasons which are not obvious, North-Arcot and Chingleput ranking second and fourth in Scheduled Tribe population do not figure at all in these awards. There are 76 resident and non-resident schools and 15 hostels meant for Scheduled Tribes in the whole state. The distributions of these institutions is haphazard and bears no relationship to the concentration of tribes in different districts.

It is computed that between 1951 and 1974, the total outlay on tribal development amounts to only Rs. 4/- per head per year. It is also noted with some anguish that the budget estimate for 1975-76, is less than the actual outlay for 1974-75. In the increased allotment of one crore of rupees during the budget year of 1976-77 there is disproportionate disbursement of funds over the districts. While Salem which is inhabited by 33% of the total tribal population gets only 8.89 lakhs, South Arcot with only 4.53% of the total tribal population in the state gets as much as 61.7 lakhs.

The actual survey covers 3% of the total tribal households in Salem District, selected through a two-stage sampling, the first stage being the hamlet-habitat and the second stage being the households. 566 households are thus selected for canvassing a structured schedule during investigations which are said to have lasted for a period of ten months. It would have been more helpful if the author had mentioned the number of field investigators actually engaged in the work and also if he had included among the appendices the actual schedule used in the survey.

Among the 566 heads of households, 542 are males and 24 are females. 8 of them are unmarried and 56 either widowed or separated. From the point of view of the size of the household, a large chunk of them constituting 63.4% of the total, have five or less members. 33.9 per cent of the households have 6 to 10 members and 2.7 per cent are large-sized units with eleven or more members.

53.2% of the respondents returned themselves as farmers, 35.9% as agricultural labourers, 7.2% as plantation labourers, 2.3% as those combining agriculture and salaried employment and 0.9% as depending on salaried employment alone. Average monthly income of 70% of the sample households is below Rs. 200/-. Households having a monthly income of less than Rs. 100/- constitute 24.7%; those in the category of Rs. 100-Rs. 199 constitute 45.4% those in the category of Rs. 200- Rs. 299- constitute 14.7%; those between Rs. 300 and Rs. 399 constitute 8%; and those in the category of Rs. 400 and more constitute about 7%.

Correlating household size with occupation, one finds that the farmers have the largest proportion of big-sized house-

holds. 46.8% of the households of farmers have 6 or more members each. Of the 15 households having more than 11 members 13 belong to the occupational category of farmers.

An interesting picture emerges with regard to indebtedness. The debt seems to rise with the economic capacity to borrow. In the group of households with a monthly income of more than 400 rupees, 50% are indebted to the tune of over Rs. 5,000. Of the households having no debt. 53.3% are in the lower income group of Rs. 100—Rs. 199. 62.1% of the households have borrowed from money-lenders. Only 2.9% could borrow from banks another 3.8% could receive loans from the government. 63.4% of the debtors mention the needs of family maintenance and 25% mention agricultural purposes as the compelling causes for the borrowing.

51% of the respondents have reported that they do not have a public health centre or any other clinic within a radius of two miles. Of the 566 heads of households, 514 have reported that they do not have a high school within a radius of 2 miles and 45 of them do not have even a primary school within a radius of two miles.

With regard to the awareness of different amenities and concessions offered by the Government, it is found that while the richer sections amongst the tribes know of the possibilities of benefits accruing from the public sources, the poorer among them seem to be utterly ignorant of them. What is even more painful is the distrust of the Government agencies exhibited by some spokesmen of the tribal people who for instance have represented that "in order to reappropriate the lands to us and remove the interlopers, union government officers with the help of the central reserve police are needed. The local revenue authorities will not restore us our lands."

In the light of these attitudes, the Director of the Institute which has conducted the study recommends the promotion of voluntary agencies to ensure motivation for self-improvement amongst the tribal people and to act as a liaison between the tribal community and the Government. Only, has been too modest in commending the book to the Governments, schools of Social work and voluntary agencies interested in ameliorative work. In fact the book provides a valuable starting point for more intensive studies in some specialised fields of Social Science such as Social Anthropology.

VILLAGE STUDIES -

Village Economic Surveys

By
B. KRISHNA RAO
Madras University.

Just as surveys of urban areas in industrialised countries have become common, rural surveys in the agricultural regions of the underdeveloped countries have become important. For establishing factual evidences regarding empirically meaningful concepts and hypotheses of economic analysis, such surveys have become indispensable. The selection of areas purposively or by sampling procedures in conformity with the objectives of the study, the classification of the sampling or the elementary units of the study, the collection of reliable data from efficient samples, the avoidance of errors and the careful application of the tools of statistical and economic analyses are some of the labours involved in village economic surveys. The sample survey method is on the whole more economical and could be more comprehensive than the census study by affording scope for relatively more intensive data collection. Indeed, carefully used sample studies may be as good if not even better than population studies. The target population can often be more easily and economically reached through samples, though the total population may be of interest in some contexts.

Village surveys may help in filling the gaps of social accounts. From these surveys an idea of the scale of the economic operations at the village level can be had such as for the levels of borrowing among rural households, the uses of fertiliser, the cost of production of crops, etc. The changes taking place in the rural economy can be also gauged by village surveys. When surveys are repeated, changes over time too can be gleaned.

Several villages studies are conducted by the Agro-Economic Research Centres in India. From such surveys gleanings can be had on (a) the demographic structure (b) the social and the occupational structure, (c) agrarian relations, (d) the structure of non-agricultural enterprises, (e) the wealth of the rural areas, (f) the income

and consumption patterns, etc. The study of Pathikonda (Agro–Economic Research Centre, University of Madras) emphasised some of these aspects and *adopted the value*–added approach (as in national income analysis) to assess the significance of village economic operations. In this way an attempt can be made to study resource gaps, the changes in growth potential, the levels of output and the living standards.

The villages are often chosen for economic studies after considering their (1) location, (2) geographical features, (3) size, (4) tenurial patterns, (5) crop–*pattern,* (6) *stages* of economic development, (7) administrative set up, and (8) amenities available; educational, medical, recreational etc. The limitations of staff and time however restrict the scope of the enquiry desired in the villages.

The sources of data for the village studies comprise in part the records, maintained by village officers, and the records of other village institutions. Discussions with the rural population, inferences drawn from household information and the personal observations of the investigators are also to be used. Qualitative data are also to be collected. They can be quantified sometimes by the application of scaling techniques. Opinion surveys are also important.

It is common knowledge that difficulties are experienced in villages in securing *accurate data relating to age,* values of land and property, home–grown and home–utilised products, household durables and financial assets, lending and borrowing transactions, volume of production, rates of consumption, stocks held of goods and the like. Here the lack of knowledge or memory on the part of the responding households or their reticence comes in the way of investigation and data collection. There are important valuation problems related to the economic stocks and flows revealed by the village households. These problems have to be met on the basis of well laid out principles, at an early stage of the enquiry. It is necessary for the investigator to stay in the village itself and study the matter under investigation carefully.

The villages are usually studied by reference to (1) physical changes, and (2) changes in economic organisation (e.g. changes in the monetisation of the economy, growth of specialisation, impact of mechanisation, application of scientific knowledge, diversification of the occupational structure, changes in employment status, and improvements in economic organisation, and in productive activities, changes in factor supplies etc.

The processing, analysis and interpretation of survey data make a call on the skills and the expertise of the survey personnel. Hypotheses are considered by testing averages, proportions, correlations, dispersion matrices etc. The survey method throws up material for structural modelling. The coefficients thus obtained may find their use in time series analysis too.

In area or land use planning concerned with the layout of buildings, the landscape, the growing points etc. a norm has to be arrived at alongside actual situation surveys. Scientific surveys regarding

livestock wealth, inland or marine fishing, uses of forest wealth pose special problems. The peculiarities of the problem in each case have to be recognised by the survey personnel. Some studies of tribal villages from an economic standpoint met with a number of difficulties in data collection. The data however have an important role in broadening the comprehension of the social economy of India.

Many Village surveys typically concern themselves with "situation analysis". This may not always induce policy changes at a subsequent stage. The resource availabilities and the potential for development are not the same all over.

Their divergence and their dynamic change are the things that make the use of the survey method important. In the planning of surveys the principle of economy requires that cost levels should be minimised for the information outputs used in applied and basic research. That the former can stimulate or speed up thinking about the needed basic theory while setting in motion the processes of remedial action to social problems has put a premium on utilising scientific village surveys.

The economist has however to realise his advantage and his limitations. It is pertinent to point out that it is difficult to distinguish the economic from the non-economic activities when the economics of time, i.e. the opportunity costs of the uses of time, are considered. There are also problems of economic rationality vis-a-vis the village institutional setting on which a diversity of opinions can be expressed. The neo-institutional approach of the economists hardly makes a greater advance over that of the sociologists, it is said. (Morgan).

VILLAGE STUDIES -

Anthropological Study of Indian Villages

A Note on Some Issues of Method

By
N. SUBBA REDDY
Madras University

When an Anthropologist makes an exclusive study of the economic life in a village for over a year, it is perhaps not unreasonable to expect a little more than what is found in Epstein's study (Epstein, 1962). A flesh and blood picture of a few agricultural families showing how they are actually managing their material and man-power resources would have been in order. The details of the working of the hereditary economic relations between the peasants on the one hand and artisans and agricultural labourers on the other, and the actual catalogue of work-items and the modes and quanta of payments with reference to individual cases would have added to the value of the book.

Apart from these omissions there are other issues of methods which arise from a study like this. Almost all the inhabitants of the two villages studied are small peasants. In the village Wangala, there are 192 households and extent of cultivated area is 631 acres—an average of 3.1. acres per household. In the village Danela, there are 153 households and the extent of cultivated land is 610 acres—an average of 4 acres per household. In both villages most of the families have their own patches of land, however small, and only a few households, that too of recent immigrants, are without any land whatsoever. It gives a picture of a community with uniformly small holdings. It is stated by the author that in no case did a holding exceeded 15 acres, taking both wet and dry land together. It is only by a miniscule classification that the landholders are divided into three classes, the small peasants, the middle peasants and the socalled 'magnates' consisting

of a few families. Tenancy and share cropping are rare, and in a few cases of absentee landholders who emigrated from the village, they are content to leave the land in the custody of their kith and kin in return for the occasional hospitality they receive when they visit the village.

How different these villages look when compared to such other villages as Iruvelipattu, where 400 acres out of a total 656 acres of cultivated land in the village was owned by one landlord in the year 1916 and whose successor managed to increase the extent of the estate to 500 acres by 1961, registering the lands in other names after the Land Ceiling Act came into force. (K. N. Raj, 1976). Villages where one or two landholders stand out on a much higher economic level than the other cultivators are a common occurence in rural India until now. The structure of social relations political authority and the very economic processes of farm management should be very different in these villages from what we see in Epstein's villages.

Hence a few questions arise in this context:

(1) Whether most of the villages in the region of Mandya (Karnataka) are of the same type and hence the villages chosen are representative of the region from the point of view of distribution of land holdings;

(2) Whether the villages chosen are atypical of the region and the author has consciously chosen villages which verge on economic egalitarinism, leaving out villages with wide discrepancies in the holdings of individual families. There is no hint about this aspect in the whole book. Is it customary for Social Anthropologists or Sociologists making intensive village studies to be silent on such questions? What then are the assumptions, explicit or implicit underlying such village studies from the point of view of social theory?

Professor Srinivas points out the economists' disregard of the intensive village studies undertaken by Social Anthropologists as a product of their exclusively instrumentalist view: "The reasons for this prejudice are perhaps complex and deep but one explanation might be their (Economists') conviction that it is a waste of time to find out what happens in single villages? Facts have to cover a wide region if they are to be useful by which is meant relevant for policy formulation and planning. A completely instrumentalist view of Social Science seems to be axiomatic among economists, if not among most Social Scientists in India" (M. N. Srinivas, 1975,:).

But concern for policy formulation cannot be entirely divorced from concern for evolving theoretical generalisations. At the root of both is the question whether any correlations or generalisations derived from the study of a single village are valid beyond the boundaries of that particular village. Social Anthropologists and Sociologists making intensive studies of single villages did pose themselves this question, and many

of them have answered it in unmistakable terms.

Mckim Marriott formulates this question in a succint way: "Can understanding of one village contribute to the understanding of the greater culture and society in which the village is embeded?" (Marriott, 1955: 171). (Let it be noted that it is taken for granted that social anthropologists engaged in the study of single villages do take careful note of the greater traditions and larger networks impinging on the life of the villagers). The answers given to the above question by Social Anthropologists and Sociologists represent the two extreme ends of the spectrum while perhaps the truth may lie somewhere in between. At one end we have the view that any village in India is a replica of Indian Culture and civilization and that the study of any one village entitles a social scientist to make generalisations applicable to the country at large. At the other extreme there is the view that each village is an unique phenomenon.

Dumont and Pocock, speak of the monotonous similarity of culture in the Indian subcontinent: "The nature of Indian Unity immediately confronts us with a problem of method. It is not merely a cultural unity ..... Above all unity is found in ideas and values. The moment we get from haphazard notes to exhaustive intensive study, the empirical diversity recedes and an almost monotonous similarity springs forth" (Dumont and Pocock, 1957: 10). Oscar Lewis undertakes a broad comparison of India and Mexico on the basis of his study of the village Ranikhera in North India and Tepoztlan in Mexico. Basing his judgment on the study of these two villages he arrives at a generalisation that Indian villages are out-marrying with larger networks of Kinship ties whereas Mexican villages are inward-looking with narrow range of relation. (Oscar Lewis, 1955: 168). Had Oscar Lewis studied a village in South India where marriages within a village are permitted, he would not have found any difference between a Mexican village and an Indian village in this respect. The same disregard for regional variations resulted in one of his associates transferring the whole conceptual scheme to the study of a South Indian village which only gave a distorted view of the operation of Kinship ties (Programme Evaluation Organization, 1956).

Mckim Marriott who has studied the village of Kissan Garhi in U.P., finds that the Brahmins and Jhats who have a higher ritual status are also in possession of most of the lands. This has at once suggested to him an internal mechanism of the culture by which a congruence is established between the ritual, political and economic statuses. On this basis he makes a sweeping generalization in the following words: "Whatever the hieratic, feudal, bureaucratic or indigenous origins of unequal wealth and power as between higher and lower castes, some formality and fixity of lands and offices through the divides of a greater state seems everywhere to underlie the order of caste ranking" (Marriott, 1955: 189). While this generalization may hold good for a large part of Northern India it is totally invalid for a large part of South India where economic and political power is in the hands of Non-Brahmins. But Marriott has drawn support for his hypothesis from one of the exceptional zones of South India, namely Thanjavur District studied by Cathaleen Gough

where the Brahmins are also the landlords by virtue of the land gifts conferred on them by the Kings in the past.

Prof. Srinivas too offers a similar postulate: ''there is a tendency towards consistency in the system; that is if a group acquires political or economic power, it also lays claim to a higher ritual status....... At a given point of time there are inconsistencies........Where the period of time is sufficiently long things tend to even themselves out'' (Srinivas, 1956 : 92). Prof. Srinivas is obviously drawing on his data on the Coorgs where members of the landed castes who are obviously not Kshatriyas are claiming themselves to be such. But his postulate goes contrary to the fact that over large parts of South India the Sudras who have wielded economic and political power for centuries have not cared to lay claim to a higher ritual status. It is surprising that Prof. Srinivas arrived at such a generalization even though he did note in the same paper that in most regions of India the locally dominant caste is not the Brahmin (M. N. Srinivas, 1956 : 86).

The generalisations of Dumont, Lewis, Marriott and Srinivas ignore the broad regional difference in India. The Social Scientists engaged in intensive village studies have an obligation not only to note the broad regional differences but to specify in respect of which region their findings and postulates are to be taken as valid.

There are some major institutional features which may vary from zone to zone within a broad cultural region. Turning a blind eye to these variations has again led to wrong observations. For instance on the functioning of the Jajamani System, diverse pictures have been presented by different authors. Prof. Srinivas, writing about the system of Mysore village, gives the impression that Jajamani System has lost its normative strength among the rural artisans: ''Each smith has an eye on the customers of another smith'' (M. N. Srinivas, 1955 : 16) But Epstein's study shows that the system is retained intact in Wangala while it has partly broken down in Danela. Eswaran's study of a village in North Karnataka also shows that the system is continuing to work without any breakdown. (Easwaran, 1966) My own study of a village in Northern India shows that the artisans are retaining the Jajamani System in all its classical rigour (Reddy, 1956).

While the Social Scientists quoted in the foregoing pages honestly believe that their data is of representative character which entitles them to make their broad generalisations, there are other writers who have knowingly chosen atypical villages for their studies but still indulge in theoretical formulations of seemingly universal validity. Bailey's studies come under this category. When his book bears the title 'Politics and Social Change—Orissa in 1959', he should be expected to be dealing with a phenomenon of a greater magnitude than that obtaining in a couple of remote villages. But this is what he himself has to say about his study and its ambit: ''Two villages are a poor sample for the whole of Orissa. Moreover they lie in a backward area where people are not politically conscious. The tours and interviews with politicians provided some comparative material. The material varied but it did correct the parochial outlook I had acquired in my own

villages" (Bailey, 1970: X). Could not any social scientist with common sense expect this much even before he commenced his intensive study of the remote villages?

His other, earlier study, 'Caste and Economic Frontier', also pertains to a very unusual village. To read about it in Bailey's own words: "Bisipara differs from most villages of its vicinity. It is peopled by Oriyas whereas the majority of populations in Kondmals is Kond. It is a village of part-time traders and middlemen. Accordingly it is more sophisticated and more advanced than the majority of villages in Kondmals. On the other hand seen against tha background of the whole of Orissa Bisipara lies *in a backward area*" (Bailey, 1970: 67). It is neither a tribal village nor a peasant village of Orissa. It is obviously one of the few unique entities. The richest family in the village is said to have an income of Rs. 1,104/- per annum (Bailey, 1958: 55). On the basis of such a study, should any one claim that his findings constitute economic laws of wide significance and validity? Srinivas castigates economists for not taking note of this study and its findings in the following words "For instance, F.G. Bailey's 'Caste and Economic Frontier' in which he studies how and when a peasant's land comes into the market seems to be almost unknown among Indian Economists" (Srinivas, 1975, 1389).

A reference may also be made to another study conducted by R. W. Nicholas in Bengal. His avowed object was to study ritual hierarchy and social stratification. But the village he chose, namely Radhanagar, is one where in his own words, 77% of the people belong to the same caste and 36% of the people are of the same rank. From the data he could gather in such a village he goes on weaving fanciful theories that *hierarchy is not visible from outside* but is only deciphered from inside as when, for example, there are superior – subordinate relations between men and women (Nicholas, 1967: 57).

These examples point to the necessity of Social Anthropologists and Sociologists taking a little more seriously the question relating to the range of validity of their findings. When one studies some *out of the way phenomenon* there should not be any expectation that others should invest it with a general validity on a larger plane. It does not mean that the unusual or exotic communities should not be studied by Social Scientists. A Social Anthropologist can certainly choose an a typical or unique village even as a specialist in abnormal psychology studies aberrant psychic phenomena. But he should clearly state the nature of his subject matter and the expected range of validity of his findings.

An altogether different position is taken by some authors like A.R. Beals and Marian Smith at the other end of the spectrum. In the preface to the book called Gopalpur, A South Indian Village, Beals writes: "There are no typical Indian villages .... to understand a single village and the people in it is to reach the beginning of an understanding of India, but it can be no more than a beginning" (A. R. Beals, 1966, VII). Having chosen a village in an outlying forest area with almost all the inhabitants living at the lowest economic levels, Beals could not have expected to arrive at any findings of larger validity or applicability. It would

have been more honest to delete the sub-title, 'A' South Indian Village' and call it an a typical jungle village in South India.

A rather overcautious view is taken by Marian Smith when he says that whatever may be the value of the village studies, they do not provide a complete picture of the life in a region (Marian Smith, 1955) Perhaps realising the basic difference between the Tanjore village studied by him and the other villages over the larger part of Tamil Nadu, Andre Beteille tries to avoid this key issue altogether: "I do not enter into a discussion of the significance of such a study for the understanding of Tamil Society as this is a controversial subject requiring separate treatment" (Beteille, 1975 : 115).

The foregoing review points out how a Social Scientist making an intensive study of a single village cannot do without taking a comparative picture of the social phenomena over the region in which the village is located. He may have to keep in mind the broad cultural differences between the different regions of the country. For instance, between the North Indian on one hand and the South Indian on the other, there are some broad differences in social structure and cultural norms: the absence of castes corresponding to the Kshatriya Varna in South India except in a few isolated pockets; the locus of economic and political power among the Sudra castes in South India excepting in a few pockets like Tanjore District where Brahmins are the landholders; the presence of cross-cousin marriage and uncle-niece marriage in South India and the absence of the same in North India; strict village exogamy in the north and the absence of the same in the south; diverse systems of Kinship in South and North and distinct patterns of combination of Kinship and territorial ties. Apart from these broad regional differences certain typologies of villages can be identified within each zone based on the patterns of distribution of land holdings, the patterns of caste composition in the villages, the working of some key economic institutions such as the jajamani system, the availability of technological aids and the incidence of religious and social sects such as the Lingayats.

Keeping such parameters in view, a social scientist making an intensive study of a village should be able to identify the incidence and the patterns of combination of these factors in the region generally, and assess the degree of representativeness of the village chosen for study in terms of these factors. Even before the social scientist finally chooses the village for his intensive study he should set his objective clearly before himself as to what type of village he wants to study and with what degree of representativeness vis-a-vis the region in which it is located. This may imply a few months of spade work and preparatory reconnoitering. This alone will make the intensive study of a single village, spread over an year or two, yield the desired results from the point of view of both theory and policy formulations. How much better it is to take all the necessary methodological care before one commences an intensive study of a village than to regret after the completion of the study that the village chosen was not suited to the object set before oneself.

REFERENCES

1. Bailey, F. G. (1958) : Caste and Economic Frontier, Oxford University Press.

2. -do- (1970) : Politics and Social Change – Orissa in 1959, University of California Press.

3. Beals, A. R. (1966) : Gopalpur — A South Indian Village, Holt Rineheart and Winston, New York.

4. Beteille, Andre. (1975) : 'The social system of a Tamil Village' in Culture in Society, Ed. B. N. Nair, Thomson Press, Delhi.

5. Dumont, L. and D. F. Pocock (1957) : 'For A Sociology of India' in Contributions to Indian Sociology Vol. I & II.

6. Eashwaran, K. (1966) : Tradition and Economy in village India, Allied Publishers, Bombay.

7. Epstein, T. S. (1962) : Economic development and social Change in South India, Oxford University Press.

8. Marriott, M. (1955) : 'Little Communities in an Indigenous Civillization' in Village India, Ed. McKim Marriott, University of Chicago Press.

9. Nicholas, R.W. (1967) : 'Ritual hierarchy and Social Relations in Rural Bengal', in Contributions to Indian Sociology New Series No. I.

10. Lewis, Oscar (1955) : 'Peasant culture in India and Mexico' in Village India, Ed. Marriott, M., Chicago University Press.

11. Programme Evaluation Organisation (1956) : Groups and Leadership in a South Indian Village, Government of India Publications.

12. Raj, K. N. (1976) : 'Village India and its Political Economy' Commemoration lecture, Department of Economics, Madras University, (cyclostlyed).

13. Reddy, N. S. (1956) : 'Functional Relations of Lohars in a North Indian Village' in Rural Profiles, Ed. by D. N. Majumdar, Ram Advani Publications, Lucknow.

14. Smith, Marian (1955) : 'Social Structure in Punjab' in India's Villages, Ed. by M. N. Srinivas, West Bengal Government publication.

15. Srinivas, M. N. (1955) : 'Social System of a Mysore Village' in Village India, Ed. by M. Marriott, Chicago University Press.

16. Srinivas, M.N. (1956) : 'Sanscritization and Westernization' in Society in India, Ed. by M. Aiyappan and Balaratnam, Social Science Association, Madras.

18. -do- (1975) : 'Village studies, Participant Observation and Social Science research in India' in Economic and Political Weekly, Vol. X No. 33-35, Special mumber.

VILLAGE STUDIES -

Impact of Directed Changes on Two Mysore Villages

By
C. PARVATHAMMA,
Mysore University.

Poverty, illiteracy, ignorance and backwardness of all kinds are evenly spread in village India so that the little affluence, progress seen in pockets is largely subsumed. Village life has been, however, glorified as early as 1832 by Sir Charles Metcalfe. He describes Indian villages as 'little republics' having everything in themselves and nearly self-sufficient.

Alternatively villages have been described as extremely poor; in perpetual poverty, squalour, disease, superstition haunting the villagers and making them abodes of conservatism. M. Darling's book on *Punjab peasant in prosperity and debt* (*1925*), Kusum Nair's book *Blossoms in the dust* (*1961*) and *Behind the mud walls* by W. H. and C. V Disers (1930) are another category of studies figuring at the farthest end of Metcalfe's 'little republics'.

The truth perhaps is midway, so that one can come across a multiplicity of problems in various combinations and permutations if not in judicious combinations. However, in recent years after the second World War and particularly in 1950's the British and American Anthropologists and Sociologists turned their attention to the scientific study of Indian villages. Thanks to the lead, Indian scholars followed them in a spate so that today many monographs on village India from different parts of the country are available. Economists, Geographers, Psychologists, Medicinemen and a large number of Journalistic style books covering vast areas in terms of space and time have sprung up.

While the British and American traditions have a distinction of their own in terms of qualitative and quantitative analysis, their counterparts the Indian scholars have, in addition to combining the two styles, introduced a third dimension, the indigeneous one. In this process, some have overdone it (Remembered Village; M. N. Srinivas) while others have oversimplified. The net result is there are all kinds of village studies paying lip service to scientific

discipline. One has to make a judicious choice and pick and chose a particular study, the methods, analysis and the style it purports. In one word, very few common indicators are being used by the researchers drawn from a single discipline, precisely because of several kinds of local, regional and other variations in men and material they handle.

The politico-economic life of the country has undergone some changes over the last three decades. After independence, the government has adopted the policy of planned economic development. There is greater emphasis on the rapid industrialisation in the recent past. But the industries are concentrated mostly in urban centres. Not much importance is given to develop basic and key industries and the need for development of small scale and cottage industries has not been properly handled, though not totally neglected.

In the field of agricultural production some efforts are made to increase production. Several innovations in agriculture are lingering on side by side with traditional practices both adding to existing problems. The principal reason for the low productivity is often attributable as much to the failure of many developmental programmes as to the traditional problems pestering Indian agriculture. The green revolution that has come about in little pockets by and large has helped only a few already rich and flourishing farmers in the villages. This has enabled further concentration of wealth and also economic and political power in the hands of a few. Thus the exploitation of masses has continued unabated.

The great economic transformation effected by the industrial revolution in European countries during the 18th and 19th centuries should have served as a guideline when India tried to experiment with western technology both in industry and agriculture. There was not merely new technique but a new spirit of adventure and experiment in the west, hence the revolutionary tempo and zealous participation of the governments kept up the speed of transformation. It is true that many factors political, economic and social—influenced the transformation in different countries but the motivation for progress and to push farther, to raise the standard of life is important. With a subsistence economy they were able to rise to a level of surplus and competition, which in large measure accounts for the success story of economic transformation, though colonialism was definitely an asset in some cases.

A similar effort was initiated in India with the introduction of Community Development Programme (CDP) in 1952. This is an attempt to bring about directed changes in rural society. The objective is to increase the income of the rural population so as to improve the standards of nutrition, health, sanitation, housing and education. This presupposes a number of changes in the existing structure, including values.

The planners, perhaps, took account of the common problems of rural people and proceeded with the idea of mitigating them through democratic methods. Therefore, much of the emphasis is laid on the policy of persuasion and voluntary participation of people in developmental activities. Though the problems of villagers are similar, there is a lot of

diversity in different areas and people which ultimately results in uneven development.

The factors which prevent the people in villages from adopting the programme to improve their living conditions are more or less clear by now. Since the programmes are voluntary, people are not favourably disposed to such innovations. The traditional gaps between high and low, rich and poor, domination and subservience are given a new lease in the latter's efforts. In all such cases their access to information and knowledge plays a crucial role. Also cultural factors and values have contributed their share and hindered rapid development.

A study was undertaken by the author to evaluate the impact of CDP on two villages in Karnataka (erstwhile Mysore state) during 1967-68 with the financial assistance of the UGC. The following is a brief summary of a few important problems connected with rural life with special reference to directed changes.

The two villages—Belagola and Dhanagalli—are situated within a radius of ten miles from Mysore city. Both come under CDP since 1961, have elected panchayats, co-operative societies, schools and are the headquarters of Gramsevaks. The study of these two villages, however, could be construed as a study in contrast. As indicated earlier much attention is paid here to discuss the developmental activities of agriculture and panchayat, than other aspects. The discussion points out why Belagola could take advantage of agricultural programmes and how Dhanagalli lags behind.

Information and knowledge, in the first instance, plays a decisive role. This has been clearly brought out by looking at the location of the two villages.

Location Belagola :

Belagola is situated in the north-west direction of Mysore city on Mysore-Krishnarajasagar main road at a distance of 8 miles. The village is located in the plains. The residential area of the village is on an elevated table land and the houses are contiguous. It is a multi caste village. Nearly 18 caste groups with a number of sub-castes are represented here. Majority are Hindus. There are 531 households. Different caste people live together with the exception of A. K. untouchables who live in a separate quarter of the village. It has varied surroundings like industrial complex, picnic spots and railway station. The famous Krishnarajasagar reservoir and Brindavan Gardens are at a distance of about 3 miles. The irrigation canal, from dam site, the main source of water passes through Belagola. Innumerable number of buses and motor cars carrying tourists and others pass through this route. There is a branch post office in the village. Nearly 45 people possess wireless sets (1968). The Panchayat and the Co-operative societies get a number of daily news papers along with others who get personal copies. Electric power reaches Belagola from Mysore. There is no drainage system worth the name. There is no hospital in the village. Only the middle school has a building and primary school is housed in a *'Chavadi'* (village common hall). For high school and college education the students of Belagola generally go to Mysore city. Inspite of

favourable surroundings the village has only 19% literate population.

A statutory panchayat is functioning in the village, since 1961. Out of 13 elected *panchayat members 11 belong to* Belagola and two come from a hamlet nearby. Two untouchables and two women members are elected on the basis of reservation. A multipurpose co-operative society is functioning in Belagola since 1959. A *Shishuvihara* (Kindergarten) is run by the panchayat since 1966. Two youth clubs and a *Mahila Mandal* are working. Besides these, there are 4 *Bhajan mandals.*

Dhanagalli :

Dhanagalli is situated on Mysore—H. D. Kote road at a distance of 10 miles from Mysore. The village is located a mile away from the main road. It lacks all those favourable factors which have helped Belagola to achieve progress. Although it is not very far away from Mysore, its geographical location acts as a deterrent for its development. There are *no easy means of communication and* transportation to Dhanagalli. Urban *impact hardly obtains here and there are* no industries nearby. In spite of CD institutions functioning since 1961 the village remains backward. There is a branch post office in Dhanagalli. The village has no electricity. It has a group panchayat and includes members from three other neighbouring villages. Hardly 3 or 4 buses ply daily on this route. Other modes of travel are limited. Newspapers and magazines are seen sparingly. This has affected the village adversely. Within the village there are no roads and no drainage system. There are some tiled houses owned mostly by upper caste people. Of the 6 public wells in the village two exclusively belong to the untouchables. Wells are at a great depth and occasionally go dry during summer. There is no hospital in the village. Besides a primary school there is one middle school. Only 16% of the population are literate here. A *Shishuvihara* is maintained by the Panchayat.

Compared with Belagola, Dhanagalli is most backward in all respects.

SOCIAL STRUCTURE :

The analysis of the inter caste—economic, political and ritual inter-dependence—in Belagola and Dhanagalli would help understand the extent to which the CD schemes have been successful in breaking through the traditional relationships. The economically better, politically powerful and ritually superior caste groups are in a decisively advantageous position in contrast to other caste groups.

Belagola :

Okkaligas (peasant community) are numerically preponderant here. They also own much of the irrigated and dry land in the village. A. K. untouchables constitute the next largest group in the village. The representation of various caste groups in the village is given in Annexure I. The approximate ritual hierarchy of castes is given below :

Approximate hierarchical position of caste groups in Belagola

I	Brahmin	Lingayat	Smith
II	A	Okkaliga, Shepherd, Marata, Ganiga, Potter, Uppala setty	
	B	Besta, Barber, Washerman	
	C	Basket maker, Toddy tapper, Muslims, Christians Korama	
III		A. K. untouchables Madiga	

It could be seen that Belagola is having most of the servicing castes which helps its development. Most of the activities in the village cannot take place without reference to the dominant Okkaliga group. The Adikarnataka (A. K. untouchables) who constitute the second largest caste group, are entirely dependent on caste Hindus to earn a living. Under all circumstances they essentially remain subservient to caste Hindus.

Dhanagalli :

Dhanagalli is also a multi caste village but very few caste groups are represented here. Numerically and in terms of land holding A. K. untouchables occupy the first place followed by Parivara and. Lingayat communities (see Annexure II)

Approximate hierarchical position of caste groups in Dhanagalli

I	Brahmin	Lingayat	Smith	Arasu
II	Parivara			
III	A. K. Untouchables			

A clear example of ritual superiority is exhibited in Dhanagalli where Lingayats despite their numerical minority in fact continually dominate in almost all respects in the village. Because only 6 caste groups are represented here for the essential services of the servicing castes like the Barber, Washerman, Potter, Dhanagalli is dependent on neighbouring villages.

ECONOMY:

The total acreage of agricultural land in Belagola is about 1,936 of which 1,002 acres are dry and about 934 acres are wet land. Because of its favourable location and perennial water source Belagola could diversify its economy and generate more employment opportunities. In fact the industries and the proximity to the communication link has enabled Belagola to respond quickly to directed changes.

Dhanagalli has dry cultivable land of 606 acres. Rain water is the only source of irrigation. It is only subsistence farming without any scope for diversification of economy. The occupational and employment pattern revolves around agriculture. The economic standards of people are generally low. Therefore, majority are poor and only a few can be enumerated as middle class.

While agricultural economy has changed the face of Belagola and thrown open varied opportunities for diversification of the economy, Dhanagalli remains tradition oriented and economically stagnant. Could that backwardness of the village be related to the large majority of untouchables who are ritually inferior, economically poor, politically subservient and educationally backward? The CDP becomes workable largely through local leaders and these leaders generally hail from upper castes, known for their traditional dominance as can be seen from Belagola. Although generalisations based on a village study cannot be over drawn yet coupled with other factors Dhanagalli's backwardness can be partly connected and explained with reference to the 50% of untouchable population who cannot provide leadership either in the traditional structure or under new circumstances.

VILLAGE PANCHAYAT:

The important aim of the planned efforts initiated through the CDP is to bring about social, political and economic revolution to strengthen democracy and then build a welfare state. Personal freedom, equality and social justice are sought to be strengthened through these schemes. A foundation for these ideals has to be laid at the smallest administrative units. Accordingly, the village panchayats and co-operatives have come to occupy a central place and play key roles.

In Belagola statutory panchayat membership is dominated by Okkaligas. The office bearers like Chairman, vice-chairman are from the same community. In the beginning membership was unanimous. After three panchayat elections political maturity among the people of Belagola is clearly visible. The factional differences became apparent during 1964-65 and by 1968 half the members in panchayat were replaced. In fact the Okkaliga caste, group and the factions in the panchayat, it is said, hampered the development of the village. Nevertheless, factional politics has been helpful in maintaining a balance in the village council.

In Dhanagalli as the village is quite small and backward when compared with Belagola the feeling of belonging to the same village influences the people to return the candidates unopposed.

While Belagola is having a panchayat for itself and only one small hamlet

is attached, Dhanagalli shares Panchayat membership with three other villages. This has made membership competitive among different villages. Even here developmental activities are hampered because of members' affinity to their villages and not to panchayat role.

People are sceptical about the ability and the role of panchayat members. Participation of people in panchayat elections has improved. While people are happy about the functions of panchayat in Belagola, in Dhanagalli they are critical. However, panchayat has not helped to bring about close relationship between villagers and CD officials. The overall similarity between the two panchayats is that they have been able to provide some physical amenities in the village but have failed with regard to health, agriculture and other developmental programmes.

CONCLUSION :

The Panchayat organisation, the communication channel, the agriculture, all constitute the central theme of the CDP. The panchayat and co-operatives have so far lead to political and economic dominance of the already powerful sections. The panchayat, however, has not been taken seriously by the people as their own institution. It is equated with the government Institutions, therefore, its scope is being limited to carrying out village administration only.

The rate of awareness in the field of agricultural innovations differs between irrigated and non-irrigated areas. The economic conditions of the farmers have a close bearing on the rate of awareness. The communication methods have a very important role to play in making farmers become aware of the innovations introduced by the CDP. Several factors like the availability of essential goods, the complexity of the improved methods, their suitability to local conditions, the cost of innovation and relative economic advantage, all influence the rate of adoption of farm innovations. It his clear that the use of seeds, fertilisers and compost are popular amongst the farmers in Belagola.

Belagola and Dhanagalli are not the only exceptions to exhibit rather a dismal picture of the CDP. There are innumerable villages all over the country which would have the same story to tell. Although between themselves they exhibit a degree of difference in the rate of awareness, impact and consequent changes, both Belagola and Dhanagalli fall in line with others.

To sum up it can be recalled, how Belagola is located in a favourable position and hence is better equipped to absorb new ideas. It continues to operate within the framework of traditional caste and religious values. The Brahmins rank ritually higher but economically, politically and numerically, the Okkaligas dominate the village. Internal factions among the Okkaligas have enabled other caste groups to provide a basis where they can make themselves count by supporting one faction against the other. If all the Okkaligas were to be united, it would be very difficult for other castes. Even as the village panchayat and co-operatives are dominated by Okkaligas the factional alignments in these organisations mitigate the evils of domination by a single caste group.

Like Belagola, Dhanagalli is also operating within a caste structure. The village is less exposed to outside world. Because of lack of easy means of communication and accessibility, the village has remained very backward. The overall dominance of traditional values and practices are discernible in every aspect of life. Hence the impact of CDP has hardly brought about intended changes. This perhaps is also due to caste composition and relative caste strength in the village. The AK untouchables are numerically preponderant but otherwise they are dependent upon the caste Hindus even for a living. If Okkaliga factions hinder the progress of Belagola, preponderande of untouchables acts as a stumbling block for the effective implementation of CDP in Dhanagalli. Constitutionally, political and economic privileges are provided to the untouchables but in the village situation they can hardly claim these privileges. There is dearth of knowledge. So they have to remain subordinate by force of circumstances. On the basis of numerical strength the AK untouchables should have provided leadership in panchayat. But it is unbelievable to think of an untouchable becoming a chairman in Dhanagalli panchayat in the near future. Introduction of CDP institutions thus has strengthened the position of traditional leaders and emergent leaders.

The aspirations and achievements of Belagola people are visible in terms of formal education, material comforts, both necessities and luxuries and enterprising nature. In all these respects Dhanagalli present a very poor comparision. The poor housing conditions and the preponderance of huts present a sharp contrast with Belagola. Much of the factional fights and competitions are confined only to the rich in Belagola. The near poverty of Dhanagalli people has not provided any scope for factions within the village.

ANNEXURE I

POPULATION AND LANDHOLDING IN BELAGOLA

Caste-groups	No. of house-holds	Popula-tion	Percen-tage	Land Ownership DRY Acres	DRY %	WET Acres	WET %	TOTAL Acres
1. Okkaliga (Peasant)	261	1,354	54.2	807	80.3	795	85.0	1,602
2. A. K. Untouchable	86	363	14.5	99	10.0	60	6.5	159
3. Barbar (Nayanakshariya)	28	139	5.6	60	6.0	35	3.6	95
4. Ganiga (Oilman)	34	165	6.6	9)		30	3.3	39
5. Brahmin	7	37	1.5	5)		8)		13
6. Smith (Achari)	27	103	4.1	4)	3.7	5)	1.6	9
7. Muslim	10	54	2.2	–)		1)		1
8. Potter (Kumbara)	10	41	1.6	15)		–	–	15
9. Fisherman (Besta)	10	47	1.9	3)		–	–	3
10. Toddy tapper (Idiga)	20	52	2.1	–	–	–	–	–
11. Washerman (Agasa)	9	53	2.2	–	–	–	–	–
12. Madiga untouchable	12	28	1.1	–	–	–	–	–
13. Kuruba	6	16	0.6	–	–	–	–	–
14. Marata	2	12	0.5	–	–	–	–	–
15. Meda	2	11	0.4	–	–	–	–	–
16. Uppalashetty (Uppara)	4	8	0.3	–	–	–	–	–
17. Lingayat	1	7	0.2	–	–	–	–	–
18. Korama	2	10	0.4	–	–	–	–	–
Total	531	2,500	100.0	1,002	100.00	934	100.0	1,936

ANNEXURE II

POPULATION AND LANDHOLDING IN DHANAGALLI

Caste-groups	No. of House-holds	Population	Persentage	Land Ownership DRY Acres	Land Ownership DRY %
1. A. K. Untouchable	83	396	50.4	254	41.9
2. Lingayat	37	162	20.6	170	28.1
3. Parivara	46	193	24.7	165	27.2
4. Brahmin	3	14	1.7	9	1.5
5. Arasu (Kshariya)	3	17	2.1	8	1.3
6. Smith (Achari)	1	4	0.5	-	-
Total	173	786	100.0	606	100.0

PUBLICATIONS OF
MADRAS INSTITUTE OF DEVELOPMENT STUDIES

Publishers
Sangam Publishers, 11 Sunkurama Chetty Street, Madras 600 001

I. Books Published

		Price
1.	Alladi Vagiswari: Income Earning Trends and Social Status of the Harijan Community in Tamil Nadu, 1972	Rs. 10.00
2.	R. K. Sampath and Jayalakshmi Ganesan: Economics of Dry Farming in Tamil Nadu, 1972	Rs. 15.00
3.	Rajammal P. Devadas: Nutrition in Tamil Nadu, 1972	Rs. 15.00
4.	Malcolm S. Adiseshiah (Ed.): Techniques of Perspective Planning 1972 *	Rs. 15.00
5.	C. T. Kurien (Ed.): A Guide to Research in Economics, 1973	Rs. 30.00
6.	G. Venkataramani: Land Reform in Tamil Nadu, 1973	Rs. 15.00
7.	Malcolm S. Adiseshiah (Ed.): Plan Implementation: Problems and Prospects of the Fifth Plan 1973*	Rs. 9.40
8.	M. Ramamurthy: Poverty and Supply of Wage Goods in Tamil Nadu, 1974 ...	Rs. 20.00
9.	K. G. Rama: Women's Welfare in Tamil Nadu, 1974	Rs. 10.00
10.	G. Venkataramani: Minor Irrigation in Tamil Nadu, 1974	Rs. 20.00
11.	C. Selvaraj: Small Fishermen in Tamil Nadu, 1975	Rs. 10.00
12.	J. Viswanathamurthi and C. L. Narasimhan: Rural Employment in Tamil Nadu, 1976	Rs. 24.00
13.	R. Ethiraj: Plantations in Tamil Nadu, 1976	Rs. 10.00
14.	V. Rengarajan: Rural Housing in Tamil Nadu, 1976	Rs. 27.00
15.	S. Ramanathan: Tribal Welfare in Salem District, Role of Government and Voluntary Agencies, 1977	Rs. 30.00
16.	T. C. Mohan and C. L. Narasimhan: Status of Unemployed ITI Craftsmen in Tamil Nadu, 1977	Rs. 20.00
17.	S. Ramanathan: Tribal Welfare in Kalrayan Hills (Mimeographed)	

II. In the Press

18. Malcolm S. Adiseshiah (Ed.): Backdrop to the Learning Society.
19. V. Rengarajan: Link Roads in Tamil Nadu.
20. Alexander Joshua: Rural Primary Education and Adult Literacy in Tamil Nadu.
21. Barbara Harriss: Paddy and Rice Marketing in Northern Tamil Nadu.
22. N. Rajagopala Rao and V. Lakshmana Rao: Introduction to Mathematics and Statistics.
23. M. Srinivasan: Possibilities of Crop Rotation in Thanjavur District.

III. Future Publications

24. M. Srinivasan: Economics of Sugarcane Cultivation in Tamil Nadu.
25. V. J. Ravishankar: and K. A. Zacharioh
Educational Profile of Jobs in Tamil Nadu.
26. V. Rengarajan: Impact of Mechanisation on Agriculture in Tamil Nadu.

* MIDS-ITES publication printed by the Government Press, Madras.

Regd. No. M. 8831

MADRAS INSTITUTE
OF
DEVELOPMENT STUDIES
(M I D S)

The Institute founded and run by Dr. Malcolm S. Adiseshiah is a registered trust.

The aim of the Institute is to contribute to the economic and social development in Tamil Nadu and India.

The activities of the Institute are:

—Studies and action-oriented research in micro-development problems;

—Documentation and library service in development programmes;

—Exchange and dialogue at the State, National and International levels on development issues;

—Publication of papers and research results of the Institute.

M. I. D. S. LIBRARY MADRAS

Printed by Aslami Printers, Arunachalapuram, Adyar, Madras-600 020.
Editor: Dr. Malcolm S. Adiseshiah.